





RHOPALOCERA EXOTICA,

BEING

Illustrations of New, Rare, and Unfigured Species

OF

BUTTERFLIES.

BY

HENLEY GROSE GROSE-SMITH, B.A., F.E.S., F.Z.S., ETC.

VOL. III.

WITH SIXTY HAND-COLOURED PLATES.

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PREFACE.

THE probability that I might not live long enough to complete a Fourth Volume, and the increasing difficulty in providing a continuous supply of new species, have induced me to decide upon discontinuing this Work on the completion of the Third Volume.

As a Supplement to those valuable Publications of the late Mr. Hewitson, "Exotic Butterflies" and "Diurnal Lepidoptera," I venture to hope that "Rhopalocera Exotica" may be considered equally interesting and valuable.

About seven hundred species have been figured and described in "Rhopalocera Exotica," of which a very large proportion are new to science, the remainder being species described by Mr. Hewitson, Mr. Bates, Dr. Butler, Dr. Staudinger and one or two others, which have not previously been figured. In many cases figures of the uppersides of both sexes, together with the underside of the male or female, have been supplied.

The fine series of African and Oriental *Lycanida* which are described and figured will, I trust, be a valuable contribution to the knowledge of these beautiful groups. Descriptions alone without accompanying Figures would, in most of the species, be quite inadequate to identify them satisfactorily.

My best thanks are due to my friend the Hon. Walter Rothschild and to Dr. Jordan for the loan of the many fine species in the Tring Museum, which are included in the latter part of the book, and for valuable information.

I also have to thank Mr. Kirby (who was associated with me in the preparation of the first two Volumes), Dr. Butler and Mr. Heron, of the British Museum, for the assistance they have given to me.

In conclusion, I must not omit to place on record my high appreciation of the accuracy of the Figures and the delicacy of the colouring of the Plates drawn by Mr. Horace Knight, which comprise a considerable number of the Plates in the second and the whole of those in the third Volume. The beauty of his Figures has largely contributed to the attractiveness of the book.

H. G. GROSE-SMITH.

5, Bryanston Square, Hyde Park, London. July, 1902.





BRYCINIDÆ I.

THORIZA ANDORIS.



West N wm an nag

* C LUCILLA CAMISSA 7 & ARICORIS FLAMMULA
5 4 ASTERRA 9 L BUCKLEYI 3.
5 S SUBERRA 1 5
10 13 ARICORIS PLAGIARIA 6.

ERYCINIDÆ.

PLATE I.

GENUS LUCILLA. HEW.

I.—LUCILLA CAMISSA. Figs. 1, 2.

Lucilla Camissa, Hew. "Equat. Lep.," p. 55 (1870).

Exp. $1\frac{6}{10}$ inch.

"Male. Upperside. Black. Anterior wing with a broad oval orange band at the middle. Posterior wing cerulean-blue with the nervures, the costal margin and apex (which are broad), and the outer margin black.

"Underside. Green-blue: the nervures broad and black. Anterior wing as above, except that the apex is green-blue. Very easily known by its remarkable resemblance to Catagramma Tolima."

Hab. Ecuador (Buckley).

In the Collections of Mr. Hewitson at the Natural History Museum and of Mr. Grose-Smith.

II.—LUCILLA ASTERRA. Figs. 3, 4.

Lucilla Asterra, H. Grose-Smith, "Annals and Magazine of Natural History," Ser. 7, Vol. II. (July, 1898).

Exp. $1\frac{1}{2}$ inch.

Male. Upperside. Anterior wings dark shining blue, with the middle of the disc crossed by a broad, oblique, suboval crimson band, which extends into the outer part of the cell and below the lowest median nervule. Posterior wings rather paler shining blue, with seven elongate, triangular, pale greyish-blue streaks on the disc between the veins, those in the middle the most elongate and gradually becoming shorter towards the apex; the bases of these streaks do not quite reach the outer margin.

Underside dull bluish-black; the band on the anterior wings is coloured orange; on the posterior wings the pale blue streaks of the upperside are steel-blue, become linear, and extend as far as the cell, towards the end of which is a short steel-blue marking.

Hab. Colombia (Pratt).

Nearest to Lucilla Camissa, Hew., but quite distinct. In the Collection of Mr. Grose-Smith.

III.—LUCILLA SUBERRA. Figs. 5, 6.

Lucilla Suberra, Hew., "Equat. Lep.," p. 94 (1877).

Exp. $\frac{17}{20}$ inch.

- "Male. Upperside. Dark brown. Anterior wing with a large cordate scarlet spot, covering nearly half of the wing, a little before the middle.
 - "Underside as above, except that it is grey-green, with the nervures black.
- "Female on both sides grey-green, with a larger round orange spot beyond the middle of the wing.
 - "In form nearly like Limnas."

Hab. Ecuador (Buckley).

In the Hewitson and Mr. Grose-Smith's Collections.

GENUS ARICORIS. WESTW.

I.—ARICORIS FLAMMULA. Figs. 7, 8.

Aricoris Flammula, Bates, "Journ. Linn. Soc. Zool.," IX., p. 404 (1868). Exp. $1\frac{3}{4}$ inches.

- "Male. Fore wing triangular, hind wing with the anal portion broadly produced and its margin tridentate. Above purple-black, with a broad streak in the middle of the hind border of the fore wing and the whole discal area of the hind wing rich scarlet; a white belt crosses the apical portion of the fore wing; the abdominal margin of the hind wing is tawny-yellow.
- "Beneath pale brown; a streak at the base of costa of fore wing tawny white; belt white. Hind wing with the abdominal border broadly rufous tawny;

disc whitish; outer border darkish brown, with a submarginal yellow streak, broad at the anal angle and terminating before reaching the apex; margins edged with white; fringe blackish."

Hab. Banks of the Tapajos and at Ega.

In the Hewitson and Mr. Grose-Smith's Collections.

II.—ARICORIS BUCKLEYI. 8. Figs. 9, 10. 9. Fig. 11.

Aricoris Buckleyi, H. Grose-Smith, "Annals and Mag. Nat. Hist.," Ser. 7, Vol. II., p. 72 (July, 1898).

Exp. δ . $1\frac{3}{4}$ inches, \circ . 2 inches.

Male. Upperside. Both wings dark blue, except the apex of the anterior and the costal margin of the posterior wings, which are rather broadly black.

Underside. Both wings bronzy brown. Anterior wings with a pale streak extending along the basal two-thirds of the cell, and a basal diffused orange patch below the cell; four submarginal conical white spots on the disc between the veins, the lowest of which near the outer angle is bifid. Posterior wings with three basal orange streaks, one on the costal margin the shortest, the second in the cell and extending a little beyond it, the third the longest, in the interspace between the lowest median nervule and submedian nervure; five submarginal conical white spots on the disc between the veins, of which that nearest the anal angle is bifid and the most elongate.

Female. Upperside bronzy brown. Anterior wings with the disc crossed beyond the cell by a broad oblique orange band, extending from near the middle of the costa, which it does not quite reach, and where it is rather paler, to the lowest median nervule, but not reaching the outer margin; the outer edge of the band is rather sinuate.

The UNDERSIDE is paler bronzy brown. On the anterior wings the band is pale tawny, and towards the outer angle is an indication of the bifid conical spot in that position on the underside of the anterior wings of the male. Posterior wings with a submarginal row of white conical spots as in the male, but much less distinct.

Hab. Ecuador (Buckley).

In the Collection of Mr. Grose-Smith.

Nearest to A. Velutina (Bates).

III.—ARICORIS PLAGIARIA.

Exp. 2 inches.

Male. Upperside. Both wings browner than in A. Buckleyi, with the apex of anterior and anal angle of posterior wings more acute than in that species, with purple suffusions, which on the anterior wings extend broadly from the middle of the disc to the inner margin nearly to the base, and on the posterior wings cover the anal third of the wings, but do not extend into the cell.

Underside. Paler bronzy brown than in A. Buckleyi, especially towards the outer margins, and without the marginal conical white spots and basal orange streaks of that species.

In the Collection of Mr. Grose-Smith.

Unfortunately my two specimens are without locality, but I believe that they were in the Buckley Collection sent home soon after Mr. Hewitson's death. The coloration of A. Velutina is bluer and more extended than in A. Plagiaria.



ERYCHUMA II.



Horace Knight del et lith

West, Newmati in.p

1 2. PHELES RUFOTINCTA. 9.10. ITHOMEIS SATELLITES.
3 4. ,, RUFULA. 11.12. ,, AERELLA.
5. ,, FENELLA. 13. ESTHEMOPSIS SARACENA
6. XYNIAS CHRISTALLA. 14. CHAMÆLIMNAS SPLENDENS
7 6. ITHOMEIS MIMICA 15.16. LEPRICORNIS MACARA
17.18. SYMNIACHIA MIRON

ERYCINIDÆ. II.

GENUS PHELES. HERR SCHÄFF.

I.—PHELES RUFOTINCTA. Figs. 1, 2.

Pheles Rufotineta, Bates, "Journ. Linn. Soc.," Vol. IX., p. 379 (1867). Exp. $1\frac{1}{2}$ inches.

Male. "Same shape and size as P. Heliconides, Herr Schäff. Black; basal half of fore wing with three elongate hyaline spots, and apical part with five shorter and similar spots, but with the outer portion orange-coloured and opake. Hind wing with the outer margin only black, the rest being hyaline, divided by the black nervures; an orange stripe extends along the costa and on the inner side of the outer borders, interrupted by the black nervures. Body, legs and antennæ black."

Hab. Ega, Amazons (Bates) and Ecuador (Buckley).

In Mr. Grose-Smith's Collection.

II.—PHELES RUFULA. Figs. 3, 4.

Exp. $1\frac{1}{4}$ inches.

Upperside differs from *Pheles Rufotincta* in the apex, on the anterior wings, being more broadly dark brown and the orange band narrower and ceasing on the lowest median nervule instead of extending nearly to the outer angle and inner margin; on the posterior wings there is no orange stripe as in *P. Rufotincta*, but there is a small orange spot on the inner side of the dark marginal border above the upper median nervule.

Underside. Anterior wings as above. Posterior wings with two short basal orange streaks, and the orange spot as on the upperside, followed between the veins by three other indistinct and minute orange spots.

Hab. Ecuador (Buckley).

In Mr. Grose-Smith's Collection. vol. III., July, 1902.

III.—PHELES FENELLA. Fig. 5.

Exp. $1\frac{3}{8}$ inches.

Upperside. Greyish-black with hyaline areas between the veins, the apical third greyish-black with a large transverse semi-hyaline white patch in it indented outwardly between the veins and irregular on its inner edge. Posterior wings broadly bordered by greyish black, cilia towards the apex narrowly white.

Underside, as above.

Hab. Paramba, Ecuador (Rosenberg).

In the Collection of Mr. Grose-Smith.

This insect has a great resemblance to Xynias Cynosema, Hew., but the white patch on the anterior wings of that species is less hyaline and different in shape.

I.—XYNIAS CHRISTALLA. Fig. 6.

Exp. $1\frac{1}{4}$ inches.

Upperside differs from X. Cynosema in the shape of the white patch on the anterior wings, which is somewhat narrower and at its lower end projects inwardly, and there is an additional indistinct orange streak along the inner margin. On the posterior wings the dark outer margin is wider than in X. Cynosema.

On the UNDERSIDE the orange streaks on the outer and inner margins of the anterior and on the outer margin towards the anal angle of the posterior wings are brighter and more strongly developed.

Hab. Ecuador (Buckley).

In Mr. Grose-Smith's Collection.

GENUS ITHOMEIS. BATES.

I.—ITHOMEIS MIMICA. Figs. 7, 8.

Ithomeis Mimica, Bates, "Transactions Linn. Soc.," Vol. XXIII., p. 542 (1862).

Exp. $1\frac{3}{4}$ inches.

"Fore wing: Above, dull black, with a reddish tinge on the margins near the base; a triangular spot traversed by the median nervure in the basal part of the disc and an obscure spot between the second and third median branches, dull greyish-white; a broad arched tawny-orange belt parallel to but distant from the outer margin, beginning on the costa and not reaching the hind angle. Beneath, the same, except that the tawny-orange belt is yellower, and that there is a stripe of the same colour on the costal and hind margins, near the base.

"Hind wing: Above, dull black; the disc crossed behind the cell by an obscure, narrow, greyish stripe, traversed by the dusky nervures; a broad regular marginal stripe along the hind margin and the abdominal edge orange-tawny. Beneath, the same, except that there is a whitish streak at the base of the costa. Body and antennæ black; forehead silvery white; abdomen beneath orange."

Hab. St. Paulo and Ega (Bates), Ecuador (Buckley).

In Mr. Grose-Smith's Collection.

II.—ITHOMEIS SATELLITES. Figs. 9, 10.

Ithomeis Satellites, Bates, "Transactions Linn. Soc.," Vol. XXIII., p. 542. Exp. $1\frac{3}{4}$ inches.

"Fore wing. Above black; a very large triangular spot, occupying the basal part of the disc, extending nearly to the end of the cell and to the hind angle, and a macular cross-belt consisting of six spots, half-way between the cell and outer margin, greyish white, slightly transparent; a submarginal belt beginning on the costa and extending nearly to the hind margin, reddish orange. Beneath, the same.

"Hind wing. Above with the whole disc grey, semi-transparent; the costal edge black; a broad submarginal band, beginning on the costa and running parallel with the margin to the abdominal edge, reddish orange, bordered on each side with black. Beneath, the same, except that the red submarginal belt runs also along the costal margin to the base of the wing, which has also on its black costal edge a whitish stripe.

"Body and antennæ black, forehead silvery white, abdomen beneath orange."

Hab. Cupari River, a branch of the Tapajos (Bates).

In Mr. Grose-Smith's Collection, from the Wilson Saunders Collection.

III.—ITHOMEIS AERELLA. Figs. 11, 12.

Exp. nearly 2 inches.

UPPERSIDE. Dark brown with three basal semi-hyaline streaks, one in the lower part of the cell, the others below it; a transverse white band crosses the apical half of the wings from near the costa to a little below the lowest median nervule, but does not reach the outer margin; this band is broader, more regular and less broken up into spots than the band in a similar position in I. Heliconina, Bates; an orange-rufous submarginal band curving inwardly divides the apical area beyond the white band, but becomes obsolete before reaching the costa; a basal orange streak a little before the inner margin. The posterior wings are semi-hyaline except along the costa and outer margin, which are rather broadly dark brown centred by a similar orange-rufous band to that on the anterior wings and becoming obsolete along the costa towards the base.

Underside. With markings as above, but the orange-rufous band is brighter and broader, and is continued uninterruptedly along the inner margin, a broad band of the same colour a little before the costa from the base to the white transverse streak and a patch of the same colour at the end of the cell; on the posterior wings the orange-rufous band is broader and continues round the wings; above the band is a broad dark band extending from the base, above which is a basal broad white area along the costa.

Hab. Bolivia (Buckley).

In Mr. Grose-Smith's Collection. It is a larger insect than I. Heliconina.

GENUS ESTHEMOPSIS. FELD.

I.—ESTHEMOPSIS SARACENA. Fig. 13.

UPPERSIDE. Resembles E. Clonia, Feld., but dull black with scarcely any bluish reflections. Anterior wings, the transverse bluish-white band of spots towards the apex, as in E. Clonia, but the first spot in the band is shorter and the spots are more closely clustered together; the whitish-blue rays between the veins of E. Clonia on the posterior wings are absent.

Underside. With several greyish streaks along the inner margin of the anterior wings which are not represented in *E. Clonia*. On the posterior wings

is a row of submarginal greyish-blue spots which represent the bluish-white rays between the veins of *E. Clonia*, a greyish-blue streak in the cell, and several streaks of the same colour between the veins, but not connected with the submarginal row of spots.

Hab. Brazil.

In Mr. Grose-Smith's Collection, from the Wilson Saunders Collection.

GENUS CHAMÆLIMNAS. FELD.

I.—CHAMÆLIMNAS SPLENDENS. Fig. 14.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Anterior wings brownish-black, crossed from the middle of the costa to a little below the lowest median nervule by a transverse broad orange band slightly indented on its outer edge towards its lower end, with a short tooth on its inner edge along the subcostal nervure. Posterior wings with the basal half shining steel-blue, the outer half duller brownish-black than the ground colour of the anterior wings.

Underside. The same as above, but the orange band on the anterior wings is more yellow.

Antennæ, head, thorax, abdomen and legs black on both sides.

Hab. Province Yungas, Bolivia.

In Mr. Grose-Smith's Collection.

I received this butterfly under the above name from Dr. Staudinger, but I cannot find that he has described it.

GENUS LEPRICORNIS. FELD.

I.—LEPRICORNIS MACARA. Figs. 15, 16.

Exp. not quite $1\frac{1}{4}$ inches.

Male. Upperside. Both wings dark shining blue, becoming almost black on the outer margins. Anterior wings crossed about half-way between the cell and the apex by a transverse bluish-white band commencing near the costa and ceasing before the lowest median nervule.

Underside as above except that the white band on the anterior wings is vol. III.—July, 1902.

irrorated on both edges by blue scales and there are several streaks of pale blue towards the inner margin. On the posterior wings there is a series of bright shining blue streaks between the veins extending from the base to just before the outer margin; the streaks towards the apex are nearly linear, but become wider towards the inner margin.

Hab. Valdevia, Colombia (Pratt).

In Mr. Grose-Smith's Collection.

GENUS SYMMACHIA. HÜBN.

I.—SYMMACHIA MIRON. Figs. 17, 18.

Symmachia Miron, H. Grose-Smith, "Annals and Mag. Nat. Hist.," Ser. 7, Vol. II., p. 71 (July, 1898).

Exp. $1\frac{1}{8}$ inches.

Male. Upperside. Anterior wings resemble those of S. Jugurtha, Stgr., but the semi-hyaline yellow space beyond the black bar at the end of the cell is widest on the costal margin, instead of being narrowest, beyond which are five semi-hyaline elongate white spots on the disc, the uppermost and lowest of which are minute; the orange-rufous bar on the inner margin is wider and more elongate. The posterior wings are orange-rufous, bordered all round rather narrowly by black.

Underside. Anterior wings as on the upperside, except that the inner marginal rufous band is represented by a pale buff streak. Posterior wings black, with a triangular spot near the base of the cell; two subcostal spots on the disc, another elongate spot at the end of the cell; a broad, more elongate streak near the inner margin, reaching to the base; two spots above the anal angle; an elongate bar across the median nervules before the margin, and a minute subapical spot, all of which are shining pale stramineous; palpi black, front of the head between the eyes orange-rufous; thorax and abdomen black in the middle, bordered by orange-rufous, with stramineous rings underneath.

Hab. Ecuador (Buckley).

A very remarkable insect; on the underside it is nearest to $S.\ Accusatrix$, Westwood.



LEMONIIDAE.

NEMEOBIILE
D.CALLANEURA & ABISARA



Horace kangant asl et ash

1 2 DICAL AMBUFA OSTRINA 3 7,8 APISARA IMRANIUS, 8.

SEMIFUFA.S. DA SATPAPS. &

LEMONIIDÆ.

PLATE I.

DICALLANEURA AND ABISARA.

GENUS DICALLANEURA.

Dicallaneura, Butler, "Proceedings of the Zoological Society of London," 1867, p. 37.

I.—DICALLANEURA OSTRINA. 6. Figs. 1, 2.

Dicallaneura Ostrina, H. Grose-Smith, "Novitates Zoologicæ," I. p. 545 (April, 1894).

Exp. $1\frac{5}{8}$ inch.

Male. Upperside. Both wings pinkish-brown, suffused with dull purple in certain lights. Anterior wings unicolorous. Posterior wings with an obscure patch of reddish-brown towards the apex, extending to the costal margin, and two submarginal obscure streaks of the same colour between the discoidal and middle median nervules.

Underside. Closely resembles D. Pulchra, Guérin, and D. Decorata, Hewitson, but differs from both in having the basal portion of the anterior wings much darker, and the pale narrow row of streaks on these wings, which crosses the disc on its outer fourth uninterruptedly, curves inwardly towards the costal margin, and terminates further from the apex in two elongate white spots, and there is an additional white spot between the veins beyond the cell. The posterior wings are more orange-brown, and the light spots and markings are less distinctly indicated, many of them being tinged with pale orange-brown.

Hab. Humboldt Bay, Dutch New Guinea (Doherty, Sept.-Oct., 1892).

In the Collections of the Hon. W. Rothschild and of Mr. H. Grose-Smith.

A good series of this species was obtained.

II.—DICALLANEURA PRINCESSA. 2. Figs. 3, 4.

Dicallaneura Princessa, H. Grose-Smith, "Novitates Zoologicæ," I., p. 544 (April, 1894).

Exp. $1\frac{5}{8}$ inch.

Female. Upperside. Both wings fuliginous-brown, with the outer half of the anterior wings in an oblique direction, from the middle of the costal margin to near the outer angle, fuliginous darker brown. Posterior wings with a submarginal row of markings of that colour between the first subcostal and the second median nervules, of which the upper one extends inwardly about halfway across the disc, the second is more restricted, and the third is more linear, and crosses the space between the veins.

Underside. Both wings bright tawny-brown. Anterior wings with the basal half of the cell pale brown, divided in the middle by a dark brown streak, followed by two dark brown lines centred with pale brown; beyond the cell crossing the space between the lowest subcostal and upper median nervules is another pale brown spot bordered internally by dark brown; beyond this is a large, outwardly oval, brownish-black patch, which covers the middle part of the disc, shading into brown on the inner side, which is nearly straight; in this patch are situate three silvery-white spots between the discoidal and middle median nervules, in an oblique direction near the outer edge of the black patch; on the inner side of the black patch, at its lower end, is a large pale brown earshaped spot crossing the median nervules; outside the black patch is a pale brown band which follows its contour, at the top of which it bends upwards to the costal margin; near the apex between the veins are three elongate silver spots, inwardly acute, rounded outwardly, with a black triangular spot in the middle of the uppermost spot. Posterior wings, basal third pale brown, with a series of dark brown streaks, which cross the cell from the costal margin to the median nervure, below which between the veins are three dark brown streaks; across the disc at its middle is a curved pale brown band broadly bordered inwardly with dark brown, three elongate oval silvery streaks are situate between the veins towards the apex, and there is a submarginal row of six elongate silvery bars, those between the two lowest median nervules and between the lowest subcostal nervule and the discoidal nervule centred with black.

Hab. Biak (Doherty).

In the Collection of the Hon. W. Rothschild.

On the upperside this butterfly somewhat resembles the next species; on the underside it is very different from any of the genus.

III.—DICALLANEURA SEMIRUFA. 6. Figs. 5, 6.

Dicallaneura Semirufa, H. Grose-Smith, "Novitates Zoologica," I., p. 544 (April, 1894).

Exp. 13 inch.

Male. Upperside. Both wings dull rufous-brown, with the apical third and outer margin of the anterior wings and the outer margin of the posterior wings darker brown.

Underside. Scarcely differs from *D. Pulchra*, Guérin. On the anterior wings the whole of the space within the cell and above it is uniform dark brown, except a streak at the base of the cell, a curved streak across its middle, and a lunular spot with a longitudinal streak above it, all white. The posterior wings are rather darker than in *D. Pulchra*, and the sagittate markings, which cross the middle of the disc from the upper median nervule to the abdominal margin about its middle, are more sharply angulated.

Hab. Humboldt Bay, Dutch New Guinea (Doherty, Sept.-Oct., 1892).

In the Collection of the Hon. W. Rothschild.

Two specimens were obtained, both males.

GENUS ABISARA.

Abisara, Felder, "Wiener Entomologische Monatschrift," IV., p. 397 (1860).

I.—ABISARA TYRANNUS. 6. Figs. 7, 8. 9. Fig. 9.

Exp. $2-2\frac{1}{4}$ inches.

Male. Upperside brown. Anterior wings with a broad tawny bar running obliquely across the end of the cell towards the hinder angle, between the subcostal and submedian nervures. Posterior wings of a rather lighter brown than the anterior wings, subdentate, the incisions marked with white, and the ends of the two lower median nervules and the submedian nervure with tawny.

Underside with the tawny band much paler. There are two yellowish-white marks in the cell, one triangular, near the base; the second transverse, and connected beneath with the transverse band beyond. Beyond the band is a curved row of four white spots; and towards the apex two more white spots,

opposite two marginal spots between the nervures. Posterior wings black, with two bands at the base, shading into yellow at their edges; the first extends to the costa, and is interrupted by a short black line running up the precostal nervure; and is more widely interrupted at the end of the cell, beyond which it fades away. The lower pale band runs parallel to the inner margin, as far as below the middle median nervule, nearly to the hinder angle; it is interrupted by two black stripes, and its outer portion between the lowest median nervule and the submedian nervure is edged on each side by the tawny part of these veins, and is marked with two black spots. The incisions are marked with white, and within them are about seven more white streaks and spots, arranged in two rather irregular rows.

Body black; palpi, legs, and abdomen beneath tawny.

Female. Upperside black. Anterior wings with a white spot at the end of the cell, a larger one towards the hinder angle, and an oblique row of three small subapical spots, the uppermost smallest, and situate nearer the base than the others. Posterior wings with a very broad white band, extending from one-fifth to three-fifths of the distance from the base; towards the apex are two small white spots.

Underside black. Anterior wings with three white marks in the cell, the first triangular, the second transverse, the third conical, and surmounted by a pale spot. There is a curved row of four small subapical spots, and a very large white spot towards the hinder angle, edged with dull yellowish on its outer border below, and with dark grey on the inner margin. Posterior wings with the broad white band as above, followed by a double row of white submarginal spots and streaks; the incisions are also lined with white. The end of the submedian nervure is tawny.

Body black; palpi, knees, and undersurface of the abdomen tawny; front orbits white.

Hab. Waigiou (Von Platen).

In the Collection of Dr. Staudinger.

The female of this species has much resemblance to several species of the genus Neptis in colour and appearance.

II.—ABISARA SATRAPS. 8. Figs. 10, 11. 9. Fig. 12.

Abisara Satraps, H. Grose-Smith, "Novitates Zoologicæ," I., p. 545 (April, 1894).

Male. Upperside. Anterior wings velvety-brown, bordered outwardly from the middle of the costal margin rather broadly, thence to the apex and along the outer margin more broadly, with brown-black, the black border more narrow towards the outer angle, where it curves a short distance along the inner margin. Posterior wings brown-black, shading into brown towards the base, bordered outwardly by an orange-brown band; this band is narrower at the apex, and gradually widens to the anal angle; on its inner edges it is irregular, and on the margin at the tips of the veins is a series of black spots.

Underside. Both wings brownish-black, the posterior being blacker than the anterior wings. Anterior wings with a streak at the base of the cell, widest at its outer end, another at its end, concave on each side, an oblique band from the middle of the costa to near the outer angle, about halfway between which and the apex is a row of spots, the two uppermost the largest and furthest from the apex; and two subapical spots, all the spots and band being greyish-white. Posterior wings with two spots in the cell, that nearest the base the largest; beyond the cell crossing the disc is a curved row of spots, those nearest the inner margin elongate; a broad band of orange-brown on the outer margin with black spots at the ends of the veins as on the upperside; in this band, further from the margin, between the veins, is a series of white conical spots centred with black, the white spot below the lowest median nervule having two black spots in it.

Female. Upperside. Both wings dusky brownish-grey. Anterior wings crossed in the middle with an oblique band of three white spots divided by the nervures, the first beyond the cell indented outwardly, the second rather smaller, the third the largest, with an indication of another spot below it; beyond the band, nearer the apex, between the veins, is a row of five white spots, that nearest the costal margin the smallest, the two next the largest. Posterior wings crossed longitudinally with a large irregular broad white band, the inner edge of which invades the cell, that part of the band which lies between the two upper median nervules is elongated outwardly until it becomes confluent with a row of white spots, which cross the disc nearer the outer margin, beyond which is an indistinct series of black spots, bordered outwardly but very indistinctly with narrow white lines, the black tips at the ends of the veins are very indistinct, and the cilia between the veins are white.

Underside. Anterior wings with the white markings more developed, and the oblique central band extended nearly to the costal margin; the outer row of spots is also extended beyond the lower end of the band, where it becomes vol. II., January, 1897.

linear, and is faintly tinged with orange. On the posterior wings the upper side of the white band is invaded by three blunt spurs arising out of the dark costal marginal area, two of the spurs being in the cell; the orange band of the *male* is represented by an interrupted ochreous band in which are situate a series of large black spots, bordered on each side with white; the tips of the veins are broadly black, with white cilia between.

Legs, palpi, and under surface of abdomen tawny; the last whitish in the female.

Hab. Humboldt Bay, Dutch New Guinea (Doherty, Sept.-Oct., 1892).

In the Collections of the Hon. W. Rothschild and Mr. H. Grose-Smith.

Mr. Doherty obtained a good series of this remarkable butterfly.



LEMONIIDÆ. NEMEOBIINÆ.

DICALLANEURA II. &c



Horace Knight del etlith

West, Newman unp

1, 2.	DICALLANEURA	DIANTHA 8.	
3.	11	n 9	
4. 5.	32	FULGURATA	

6 7 TAXILA FASCIATA 9

8 ZEMEROS 9. 10.11 DODONA 12.13.

RETIARIUS ' ANGELA & ELVIRA p

LEMONIIDÆ.

DICALLANEURA. II., ETC.

IV.—DICALLANEURA DIANTHA. &. Figs. 1, 2. Q. Fig. 3.

Exp. $1\frac{5}{8}$ inches.

Male. Upperside. Both wings dull purple. Underside closely resembles D. Pulchra, Guér, but differs as follows:—On the anterior wings the pale submarginal band which crosses the wings is interrupted on its upper half, and forms a sagittate band, the middle part of which extends inwardly towards the end of the cell; the pale spot near the end of the cell is broader and less elongate, the white basal streak along the upper part of the cell is shorter, and the white streak below the median nervure of D. Pulchra is absent; the ground-colour is not shaded with paler brown towards the base and inner margin. On the posterior wings the ground-colour is brighter chestnut-brown, and the markings are more tawny; the pale tawny band beyond the cell is broken on the subcostal nervule.

Female. The upperside scarcely differs from the same sex of D. Pulchra, and on the underside it is identical.

Hab. Milne Bay, British New Guinea (Meek).

The male is in the Collections of Mr. Grose-Smith (Type) and the Hon. Walter Rothschild, and the female in the Collection of the latter.

The principal difference between this species and D. Pulchra is the absence in the male of D. Diantha of the oblique blue band on the upperside of the anterior wings of the same sex of D. Pulchra.

V.—DICALLANEURA FULGURATA. &. Figs. 4, 5.

Exp. 11 inches.

Male. Upperside differs from D. Decorata, Hew., on the anterior wings, in the much wider area of the bright tawny brown colour, which extends over the basal and lower two-thirds of the wings, the apical third only, and a vol. III., February, 1901.

narrow outer marginal line from the middle median nervule to the outer angle, being dark brown. On the posterior wings the upper part is bright tawny brown, becoming darker towards the base and anal angle. On the underside the anterior wings closely resemble those of D. Pulchra, but the upper part is brighter and darker rufous, and the lower part is paler yellowish-brown. The posterior wings closely resemble D. Pulchra, but the pale band crossing the disc from the upper median nervule to the inner margin is much less regular, and deeply dentate inwardly.

Hab. Milne Bay (Meek).

In the Collection of the Hon. Walter Rothschild.

GENUS TAXILA.

Taxila, Westwood, "Gen. Diurn. Lep.," Vol. II., p. 421 (1851).

I.—TAXILA FASCIATA. 9. Figs. 6, 7.

Taxila Fasciata, Moore, "Proceedings Zoological Society, London," p. 832, Pl. LIII., Fig. 1, Male (1878).

Exp. 2. 2 inches.

"Allied to T. Drupadi, Horsf (= T. Haquinus, Fabr.), from Java.

"Male. Upperside differs in the apex of the fore wing being less suffused with red, and having an oblique subapical, indistinct, whitish fascia. Underside similarly marked, with the subapical fascia distinct, well defined, and pure white. The female differs from that sex of T. Haquinus on the upperside of both wings, being duller coloured, the black markings of the underside hardly visible. Underside has all the bluish silvery markings less distinct, their inner black spots obsolete. Fore wing with the oblique subapical white band more regularly margined."

Hab. Above Ahsown, Upper Tenasserim; Mergui, Tavoy; Ataran Valley, Middle Tenasserim (Hawxwell).

In the Collection of Mr. Grose-Smith and others.

GENUS ZEMEROS.

Zemeros, Boisch. "Sp. Gén.," Vol. I. (1836).

ZEMEROS RETIARIUS. 2. Figs. 8, 9.

Zemeros Retiarius, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 505 (December, 1895).

Exp. δ . $1\frac{1}{4}$ inches; \mathfrak{P} . $1\frac{3}{8}$ inches.

Male. Upperside resembles Z. Flegyas, Cram., but is paler brown; the anterior wings are more acute at the apex; the dark brown spots on both wings are bordered outwardly by pale tawny lines, instead of spots as in Z. Flegyas, and the submarginal rows of dark spots are more conical and are bordered internally by a row of tawny hastate markings.

Underside is much paler than in Z. Flegyas; the pale tawny lines beyond the dark spots and the submarginal hastate pale lines are wider, the latter being confluent at their base and forming a continuous zigzag band.

The female resembles the male on both sides, but is paler.

Hab. Male (in the Collection of Mr. Grose-Smith), Sambawa. Female, Adonara.

Closely allied to Z. Flegyas, but a larger insect, and chiefly distinguished by the rows of pale hastate markings which cross the discs of both wings beyond the middle.

GENUS DODONA.

Dodona, Hew. "Exotic Butterflies," Vol. II., p. 91 (1861).

I.—DODONA ANGELA. &. Figs. 10, 11.

Exp. 15 inches.

Male. Upperside. Both wings stramineous white; anterior wings with a subquadrate black spot on the costa about the middle, the apical third from the costa to the uppermost median nervule is also black, in which are three stramineous white spots, the uppermost round, the two others oval, the lowest, not complete, being confluent with the ground-colour; the outer margin between the

median nervules is broadly black, thence to the outer angle more narrowly black. Posterior wings with a submarginal black line from the costa at the apex to the uppermost median nervule, another submarginal line widest at its upper end between the median nervules, and a third, also submarginal, between the lowest median nervule and the submedian nervure; each of these are connected at the upper end with an irregular black line on the outer margin; anal lobe black with two short black bars above it, one slender black tail narrowly margined with white. The dark markings on the underside show faintly through the wings.

Underside. Both wings slightly silvery-white. Anterior wings crossed by two broad rufous-brown bars near the base, the outer of which crosses the cell a little before the middle, where it ceases, and is followed by a black dot below the median nervure; two bars beyond the cell, the inner of which is oblique and the outer transverse; these become confluent between the upper and middle median nervules, and separate below the latter, the inner one ceasing before it reaches the lowest median nervule, the outer one terminating on that vein; a square spot on the costa before the apex; the outer margin is rather broadly rufousbrown with a narrower submarginal line from the upper discoidal to a little below the lowest median nervule, inside which, crossing the following interspace, is a slightly curved black bar. Posterior wings with two sub-basal transverse bars from the costa, the inner bar terminating on the median nervure, the other broader on the costa, tapering, crossing the outer third of the cell and terminating on the lowest median nervule in the middle of the disc. The disc is crossed beyond the middle by two interrupted lines, the outer the broader and terminating on the middle median nervule, followed by several black spots in a diffused pale tawny area. The submarginal lines as on the upper-side.

Hab. Thandaung, Tenasserim, 3,500 feet (Hawxwell).

In the Collection of Mr. Grose-Smith.

II.—DODONA ELVIRA. 2. Figs. 12, 13.

Dodona Elvira, 3., Staudinger, "Iris," Vol. IX., p. 239, Pl. V., Fig. 6 (1896).

Exp. $1\frac{5}{8}$ inches.

Female. Upperside differs from the male in having white instead of

tawny bars, and the ground-colour is less rufous. On the anterior wings the white bar which crosses the middle of the disc is wider, especially in the middle, than the tawny bar in a similar position on the male; the middle white bar is crossed in the centre by a brown band, and the outer sinuate line is narrower and less distinct. On the posterior wings the dark markings are wider, the two subapical black spots are larger, and the lower spot is narrowly bordered outwardly by a white line which is continued submarginally to near the anal angle. On the underside of the anterior wings the central white band is similarly developed, and the submarginal band is very conspicuous and is broken into spots towards the apex.

Hab. Kina Balu, British North Borneo.

In the Collections of Dr. Staudinger and Mr. Grose-Smith.



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TAPINAS AMBUM AS A LAPIENE AMBUMIAS

- . LIPLENA ACRA A ; I S P. EUDERESIA CATALINA

LYCÆNIDÆ (AFRICAN).

PLATE I.

GENUS LIPTENA.

Liptena, Westwood, "Genera of Diurnal Lepidoptera," pl. 77, f. 5, 6 (1852). Hewitson, "Exotic Butterflies," III., Pentila and Liptena (1866). Pentila, Westwood, l. c., p. 503 (1852).

Fore wings oblong; hind wings rounded, subdentate; cell extending to middle of wing; costal nervure uniting with the costa opposite end of cell; subcostal nervure five-branched, the first branch emitted at about three-quarters of the length of the cell, and the second a little beyond the first, and running nearly parallel to it, the third emitted from end of cell, and throwing off two parallel branches at about half its length, the second of which extends along the costa nearly to the tip; the lowest, or main branch, enters the hind margin a little below the tip; first discocellular straight, the second twice as long, and slightly concave; palpi short, ascending; antennæ slender; club long, gradually formed.

I.—LIPTENA ACRÆA. Figs. 5, 6.

Westwood, l. c., pl. 77, f. 6 (1852).

UPPERSIDE. Fulvous, with broad black costal and hind margins, fore wings with a pale yellow band dusted with orange, running obliquely from the upper corner of the fulvous part of the wing nearly to the costa.

Underside, paler, fore wings with short black bands running from the costa, and gradually increasing in length to beyond the cell, separated by white spots on the costa, followed below by yellowish blotches; beyond the longest black band is a yellowish-white stripe, corresponding to that above, and two short black stripes, separated by whitish spaces; the hind margin is yellowish, marked with black and white spots, chiefly at the apex and hinder angle; hind wings with the costa broadly whitish, with six macular black stripes, the third and fourth longest, the third at the end of the cell, and running half across it; hind margin black, with two marginal rows of white spots, the innermost consisting of four spots, one of which is on the inner margin; the outermost consisting of five spots, and ending at the anal angle; disc yellowish; on the inner

margin near the base is another large black spot, having a small black dot beyond it.

Exp. $2\frac{1}{2}$ inches.

In the Collection of Henley Grose Smith.

The insect above described is, I believe, the female of that figured in the "Genera of Diurnal Lepidoptera:" As Liptena Abraxas, Westwood, falls into Tingra, Boisd, Hewitson was quite right in retaining the name Liptena for L. Acraa, Westwood, which thereby becomes the type, though he seems rather to have based the characters which he has given upon the white species figured on the same plate, which are hardly congeneric.—[W. F. K.]

II.—LIPTENA SANGUINEA. Figs. 1-4.

Liptena Aerwa, var., Hewitson, "Exotic Butterflies," III., Liptena, Fig. 12. Pentila Acrwa, var. Sanguinea, Plötz, Stettiner Entomologische Zeitung, xli., p. 198 (1880).

- "145. Pentila Acraa, Doubl. Victoria, June 7 and 12, 1873. Three specimens.
 - "a. Var. Sanguinea, Cameroons Mountains, Oct. 11, 1873.
- "Upperside, dark red, costa and tip black, as far as the discocellular nervule, whence this colour curves to the anal angle, and is very narrow at the end. There is a conspicuous transverse white spot on the dark tip, divided into three parts. The fringes are black. The hind wings have a broad black border, upon which stands a row of five white spots, and punctiform white-chequered fringes. The middle of the abdomen is also red.
- "Underside, vermilion: the transverse spot before the tip of the fore wings is white, and entirely surrounded with black; the tip is more and the anal angle less blackened than in the typical L. Acrea; on the hind wings the costa is more spotted with white, and is not so black at the base.
 - "One specimen.
 - "b. Var. Bimacula, Abo in March, Mungo in May. Two specimens.
- "Upperside, vermilion, but on the fore wings black predominates; before the tip is a yellowish-white blotch divided in two, the fringes are chequered with white as far as cell 3. Hind wings and underside as in L. Acrea. Middle of the abdomen red above" (Plötz, l. c. translated).

UPPERSIDE. Costa of fore wings, and all the hind margin black, the inner portions of both wings rich fulvous—in the male only—extending as far as the inner and lower half of the discoidal cell, but in the female extending beyond the cell, both towards the costa and hind margin; in the female there is a large black spot at the end of the cell. On the hind margins the fulvous part of the

wing is indented by the black border on most of the nervures. On the fore wings the tip is half-crossed obliquely near the costa by a row of three white spots-in the female there are four-the upper one small, the lower ones larger, but forming a continuous stripe, only divided by the nervures. The fringes of all the wings are marked with white between the nervures. Hind wings with a submarginal row of white spots on the black border, five in the female, and three, nearest to the anal angle, in the male. Under surface: Male. Fore wings with the fulvous replaced by tawny, shading into yellow on the edges, the costa with a series of short black bands running nearly through the cell, and separated towards the costa with short white bands and spots; beyond the cell the black bands on each side of the subapical stripe of white confluent spots are oblique, and extend much further; hind margin black, spotted with white above and yellow below; hind wings with the centre white, bordered outside and basally with tawny yellow, and a black border on the hind margin; from the costa run four series of spots, or more or less interrupted stripes, to below the cell; the black border is marked with two rows of submarginal spots, the inner ones, except the two first, which stand on the edge or the inner edge of the border, where it is narrowest, round; these two, and the outer spots, longer. Female: With the under surface fulvous, not much paler than above, and the markings less extended than in the male; fore wings marked towards the costa nearly as in the male; hind margin narrowly edged with black, only slightly marked with white on the incisions; hind wings with a black spot at the base on the costa, two rather indistinct spots before the end of the cell, and another below; an oblique white stripe running from the costa, and bordered by two irregular black ones, the innermost black stripe extending half across the extremity of the cell; hind margin broadly black, with a double row of submarginal spots, but the two on the edge of the narrow portion obsolete. Head and body black, head and thorax spotted with white, as are also the legs in the female; antennæ very slightly ringed with white, but the scape white beneath; palpi yellow, the last joint black.

Exp. 1 inch 7 lines to 2 inches.

In the Collection of Henley Grose Smith, the male from Angola, the female from Cameroons. Allied to $L.\ Acraa$, Westwood.

L. Sanguinea much resembles, and probably mimics, the moths of the African genus Aletis. There are either several species closely allied to L. Sanguinea, or several closely allied species, as specimens exist very similar to those figured, but half as large again; and others with no marginal white spots on the hind wings. The latter form is perhaps L. Acrae, var. Bimacula, Plötz, the short description of which is translated above. Another closely allied species, but with more uniformly red under surface, is Liptena Annechei, Dewitz, "Berliner Entomologische Zeitschrift," XXX., p. 427, t. 2, f. 2, 2a (1887).

GENUS PSEUDERESIA.

Pseuderesia, Butler, "Transactions of the Entomological Society of London," 1874, p. 532.

Type P. Catharina, Butler, l. c., Pl. XI., f. 4, 5 (Gold Coast).

As this genus has been fully characterized in an easily accessible periodical, the description need not be reprinted here.

I.—PSEUDERESIA CATALINA. Figs. 7, 8.

Dark brown, fore wings with an irregular fulvous blotch running from near the base to nearly the hind margin. It runs below the cell, before the end of which is a small red horseshoe-shaped spot, and projects towards the costa rather beyond the cell at the point where it attains its greatest breadth; on the hind wings there is a longer and narrower red stripe, covering part of the cell.

Underside, pale brown, with a double row of indistinct buff submarginal sagittate markings; on the fore wings the fulvous blotch is paler, and more sharply defined. It does not extend so far towards the base as above, but the stripe towards the costa, which is merely indicated above, is carried up to the costa, and is continued towards the base by three pale spots just below the costa. Fore wings with no spot in the cell; hind wings with four red spots, two small ones towards the base, the uppermost in the cell, and two larger ones beyond, one at the end of the cell, and traversed by the black discocellular nervule, and the other below, on the submedian nervure, horseshoe-shaped, and ending a black spot; club of antennæ long, tipped with red.

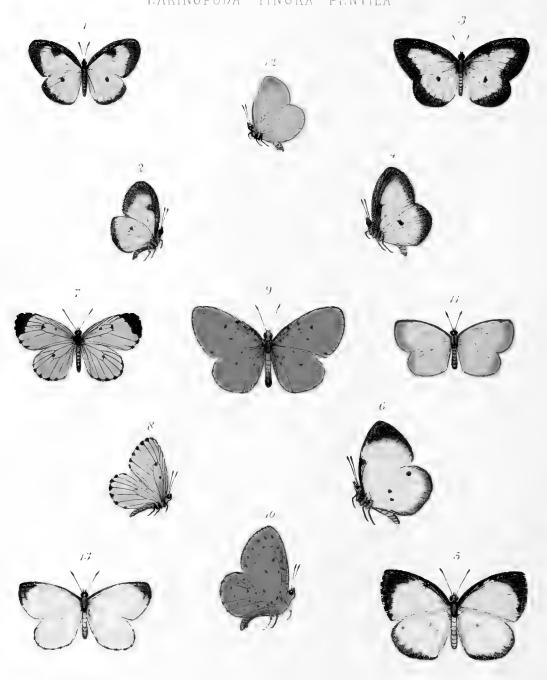
Exp. $1\frac{1}{4}$ inch.

In the Collection of Henley Grose Smith, from the Cameroons.



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ANTRUCATE RUMENTALE LARINOPODA FINGRA PENTILA



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- L LARINOPODA MUHATA S
 - '4 LARINOPODA MUHATA ç
 - 5 6 LARINOPODA VARIPES

- 7 8. TINGRA TORRIDA
- 9 10. TINGRA TROPICALIS,♀
- 11.12. PENTILA EVANESCENS.

13. PENTILA UNDULARIS.

LYCÆNIDÆ (AFRICAN).

PLATE II.

GENUS LARINOPODA.

Larinopoda, Butler, "Transactions of the Entomological Society of London," 1871, p. 172.

Type, L. Lycanoides, Butler, l. c., p. 173, Pl. 7, f. 2-5 (West Africa).

This genus, though originally regarded by Mr. Butler as belonging to the *Pierinæ*, is now more correctly referred, both by himself and others, to the *Lycanidæ*; it is nearly allied to *Liptena*, and allies.

Wings rather short, hind wings rounded; fore wings: cell short, subcostal nervure five-branched, the third branch emitted about the end of the cell; hind wing cell closed by an oblique vein; palpi long, legs thick, reddish or yellowish.

I.—LARINOPODA MUHATA. Figs. 1-4.

Pentila Muhata, Dewitz, "Deutsche Entomologische Zeitschrift," XXX., p. 428, pl. 2, f. 6, 6a (1886).

Exp. & 1 inch 4 lines; 2 1 inch 5 lines.

Male. White, semi-transparent, highly iridescent, fore wings with tip and hind margin, and the hind wings with a moderately broad, smoky-grey border; at the end of the cell of the fore wings is a large spot of the same colour, continuous with the dark costa; at the end of the cell of the hind wings is a large round intensely black spot; underside similar. Female with rather longer wings, white, not iridescent, and the border dark brown, and broader, on the fore wings invading the greater part of the discoidal cell; the border of nearly uniform width all round the wings, only gradually narrowing to the anal angle of the hind wings, where it ceases; a deep black spot at the end of the cell on all the wings; on the hind wings it is larger and more oval; on the fore wings it is nearly lost in the dark costal border. Wings very entire, antennæ black, annulated with white; all the legs red.

Hab. Cameroons.

In the Collection of Henley Grose Smith.

Resembles Liptena Libyssa, Hewitson, "Exotic Butterflies," III., Pentila and Liptena, f. 5, 6 (1866), which is a true Larinopoda.

vol. г., остовек, 1887.

II.—LARINOPODA VARIPES. Figs. 5, 6.

Larinopoda Varipes, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 363 (1887).

"White; fore wings with the costa, tip, and hind margin blackish-brown; costal border with a rounded projection just above the cell, and shortly afterwards passing into the marginal border, which occupies the apical third of the wing, but rapidly narrows, becoming very narrow and ceasing at the anal angle; its inner edge is a little irregular, especially towards the costa and anal angle. Hind wings with a narrow, ill-defined blackish hind-marginal border, commencing below the tip.

"Underside. Fore wings with a black basal streak on the costa, projecting downwards above the extremity of the cell, where it ceases; apical and hind-marginal border ashy-grey rather than black, and narrower than above, hardly reaching the anal angle. Hind wings with a narrow ashy-grey border, longer and better defined than above, and with three conspicuous round black spots, one near the end of the cell, one between this and the inner margin below the origin of the lower branch of the median nervure, and a third near the tip between the two first branches of the subcostal nervure. Legs reddish, the tips of the tibiæ and the greater part of the tarsi, black." (W. F. K. in "Annals and Magazine," l. c.)

Exp. $1\frac{1}{2}$ inches.

In the Collection of Henley Grose Smith, from Ashanti.

GENUS TINGRA.

Tingra, Boisduval, Delegorgue's "Voyage dans l'Afrique Australi," II., p. 589 (1847).

Pentila, Hewitson, "Exotic Butterflies," III., Pentila and Liptena (1866).

Allied to Liptena, but very different in appearance, being more delicate insects, of a white or yellow colour, with black spots; the third branch of the subcostal nervure is emitted before the end of the cell.

Type, Tingra Tropicalis, Boisduval, l. c.

I.—TINGRA TROPICALIS. Figs. 9, 10.

Tingra Tropicalis, Boisduval, l. c., p. 589 n., 46 (1847).

Pentila Tropicalis, male, Hewitson, "Exotic Butterflies," III., Pentila and Liptena, f. 2.

Female. Rich deep yellow, somewhat inclining to orange; fore wings with the costa dusted with black, most thickly at the base; a large black spot at the end of the cell, five small ones in the cell, one near the base; above the cell are two more spots, forming, with those in the cell, two series of three, of which the middle spot is a little nearer the base than the others; below the cell is another black spot; hind margin with an obsolete submarginal row of black spots, most distinct towards the hinder angle; a slightly interrupted black line runs from the costa near the tip, round the apex, to three-fourths of the length of the hind margin.

Underside like the upper, but more spotted; all the wings with two submarginal rows of spots, and the fringes marked with linear spots; the fore wings are otherwise spotted nearly as above, and the hind wings have one spot at the base on the costa, one large one above the middle of the cell, three small ones in the cell, and a larger one at the extremity, and three rather large spots below the cell.

Body and legs yellow, antennæ black, spotted with white beneath; tarsi spotted with black.

Exp. $1\frac{1}{2}$ inches.

Both sexes in the Collection of Henley Grose Smith; the male, agreeing with Boisduval's description and Hewitson's figure, from Natal, and the female from Delagoa Bay. The insect figured by Hewitson as the female (l. c. fig. 1) is quite distinct, and may be called T. Hewitsonii.

II.—TINGRA TORRIDA, f. 7, 8.

Tingra Torrida, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 364 (1887).

"White, tinged with orange towards the base; fore wings with the tip ashy, and two brown spots below it on the hind margin; a brown spot at the end of the cell on all the wings; hind wings with six marginal brown spots.

"Underside similar, fore wings with a second spot at half the length of the cell; the apex not ashy, but the hind margin with six spots, preceded at the end of the costa by three linear ones." (W. F. K. in "Annals and Magazine," l. c.)

Exp. $1\frac{2}{3}$ inches.

In the Collection of Henley Grose Smith, from the Gaboon.

Closely allied to T. Abraxas, Westw. (Liptena Abraxas, Westwood in Doubleday and Hewitson's "Genera of Diurnal Lepidoptera," pl. 77, f. 5 (1852)).

GENUS PENTILA.

Pentila (Doubleday, "List of the Specimens of Lepidopterous Insects in the Collection of the British Museum," II., p. 57 (1847)); Westwood in Doubleday and Hewitson's "Genera of Diurnal Lepidoptera," p. 503 (1851); Butler, Entomologist's Monthly Magazine, XXII., p. 59 (1885).

Wings oval; hind wings produced, the cell closed by a nearly straight vein; fore wings with the subcostal nervure five-branched.

Doubleday first published the name Pentila Undularis without description of either genus or species. On pl. 76 of the "Genera of Diurnal Lepidoptera," Westwood figured Pentila Zymna (fig. 7), and on pl. 77 he figured Liptena Abraxas (fig. 5), and Acraa (fig. 6). Subsequently (p. 503) Westwood dropped the name Liptena, regarding the species figured under that name as congeneric with Pentila Undularis (Boisdaval's MS. type of Pentila), and referring P. Zymna to the genus Miletus; he likewise included Tingra Tropicalis, Boisd., in the genus with doubt. Hewitson, "Exotic Butterflies," III., Pentila and Liptena (1866), revived the name Liptena, placing in it L. Acraa, and figuring Tingra Tropicalis (with which he confounded Liptena Abraxas) as the type of Pentila. It is doubtless to L. Abraxas that Hewitson refers, when he states that Westwood took his dissections from Tingra Tropicalis, for the latter species was not only unknown to Westwood in 1851, but placed by him in Pentila with doubt. It was not until 1866 that Hewitson ("Exotic Butterflies," V., Pentila and Liptena, pl. 2) figured and described Pentila Undularis, Boisd. MS., for the first time as a Liptena. No genus being recognizable until a species belonging to it is described or figured, P. Zymna would be the type, notwithstanding Westwood's error, but that the name Undularis, though MS., indicated an insect with undulating markings; and no other, therefore, could be regarded as typical, if the MS. genus Pentila was retained at all. Butler (l. c.) has arrived at the same result by a different course of reasoning. (W. F. K.)

I.—PENTILA UNDULARIS, f. 13.

Liptena Undularis, Hewitson, "Exotic Butterflies," III., Pentila and Liptena, pl. 1, f. 7 (1877).

White, fore wings tipped with brown, all the wings beneath with slender brown undulating markings.

Exp. $1\frac{1}{2}$ to $1\frac{3}{4}$ inches.

In the Collections of the British Museum and Henley Grose Smith, from the Congo. As Hewitson only figured the underside, a figure of the upper surface is here given.

II.—PENTILA EVANESCENS, f. 11, 12.

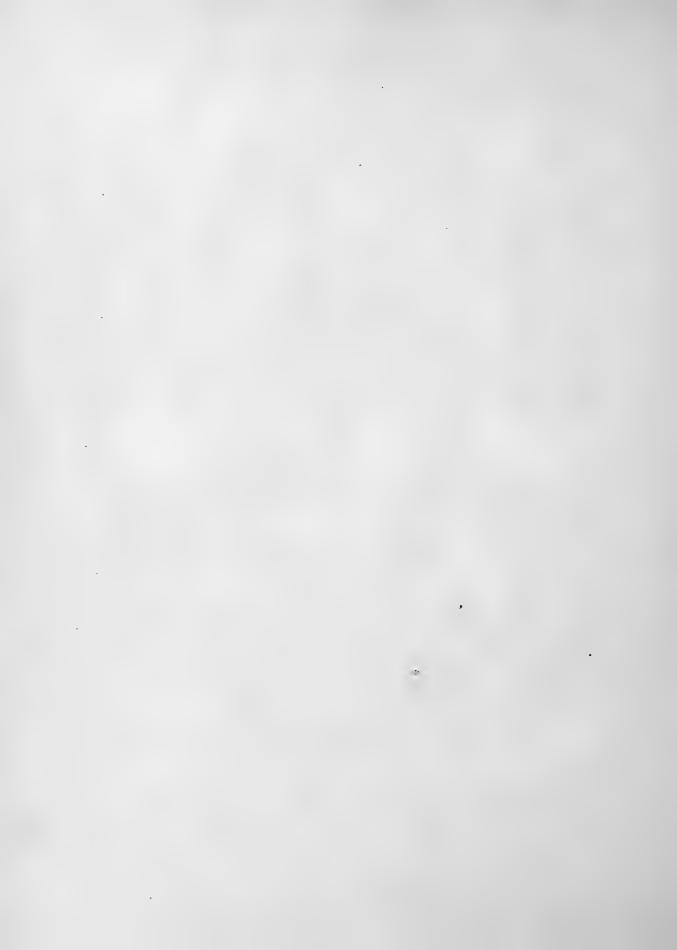
Pentila Evanescens, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 364 (1887).

- "Yellowish-white, shading into tawny-yellow towards the hind margins, the costa of the fore wings narrowly edged with black, rather more broadly for the last fourth of its length before the tip, the upper half of the hind margin of the fore wings and the hind margin of the hind wings from the middle to the anal angle very narrowly edged with black.
- "Underside uniform dull yellowish-white, the hind margins a little yellower, and the fringes tawny-yellow, edged within with a dull brown line; an obscure tawny spot at the end of the cell on the fore wings." (W. F. K. in "Annals and Magazine," l. c.)

Exp. $1\frac{1}{4}$ inches.

In the Collection of Henley Grose Smith, from the Cameroons.

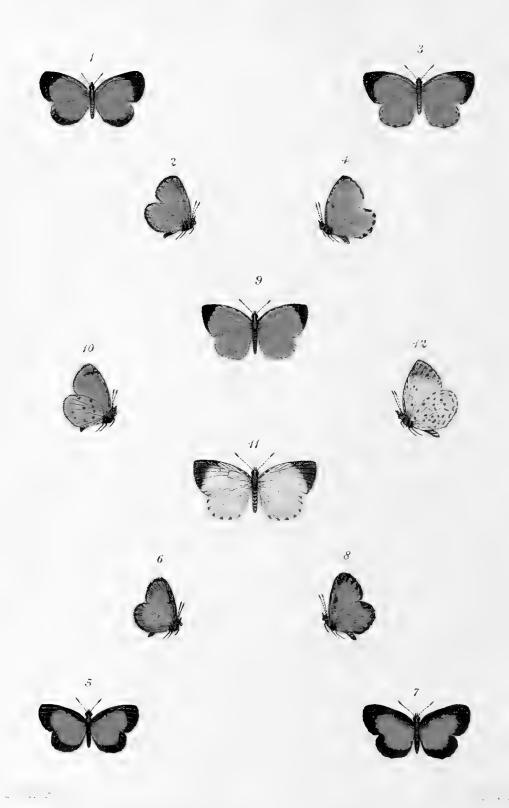
A very obscure species, somewhat resembling a small pale Canonympha in appearance.





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1 2 TERROWIMA SIMILIS

o 4 T TENERA 9 TO T PUELLA.

14, 12 T. SUEPUNGTATA

S. C. CITRINGPHILE.
MARGINALIS.

7.8 CLIMBATA

LYCÆNIDÆ (AFRICAN).

PLATE III.

GENUS TERIOMIMA.

Teriomima, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 363 (1887).

Subcostal nervure five-branched, second branch emitted before, and third branch beyond, the end of the cell; palpi rather long, ascending.

The species included in this genus agree in neuration, but differ somewhat in the length and texture of the wings. In *T. Subpunctata* (the type) the wings are almost entire, while in *T. Erastus*, Hew., and allies, they are visibly scalloped; but the gap is partially bridged over by other species.

Allied to Liptena, &c.

I.—TERIOMIMA SIMILIS. Figs. 1, 2.

Teriomima Similis, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 366 (1887).

Exp. 1 inch.

"UPPERSIDE. Yellow, fore wings with the tip and hind margin rather broadly black; hind wings with the hind margin from below the subcostal nervure with a moderately broad black border.

"Underside rather paler, the costa and hind margin irrorated with black, forming indistinct spots at the extremities of the nervures, most conspicuous towards the tip of the fore wings and on the hind wings; there are more conspicuous black dots at the end of all the cells, and the costal area, the cell of the fore wings, and the greater part of the hind wings are marked with scattered black scales.

"Antennæ black, annulated with white." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, from Ashanti.

II.—TERIOMIMA TENERA. Figs. 3, 4.

Teriomima Tenera, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 365 (1887).

Exp. a little over an inch.

vol. I., JANUARY, 1888.

"Upperside yellow; fore wings with the costa narrowly but very distinctly irrorated with black and yellow; the tip from two-thirds of the length of the costa broadly black, the colour sloping outwards, and then curving round the hind margin moderately broadly, but ceasing just before reaching the anal angle, which is marked with a black dot; hind wings with seven marginal spots at the extremities of the nervules.

"Underside. Fore wings, costa irrorated with black at the base, then with four small black dots on the nervules between the middle and a larger black spot at the tip, followed by small elongated black spots on the hind margin, on the nervules, which are nearly connected; a conspicuous black spot at the end of the cell: hind wings with no spot in the cell, but with a black spot at the tip, followed by five marginal spots at the extremities of the nervules, larger, more separated, and better defined than on the fore wings.

"Antennæ black, very narrowly ringed with white." (W. F. K., loc. cit.) In the Collection of Henley Grose Smith, from the Gaboon.

III.—TERIOMIMA PUELLA. Figs. 9, 10.

Teriomima Puella, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 365 (1887).

Exp. a little over an inch.

UPPERSIDE "tawny-yellow, fore wings with a black costal streak at the base, three costal spots beyond, and the tip black for the apical fourth, then rather irregularly narrowing along the hind margin, and disappearing before the anal angle.

"Underside. Fore wings tawny-yellow with four spots on the costa towards the base, followed by a black stripe running downwards and outwards, but ceasing at one-third of the width of the wing; beyond this is another costal spot, and an interrupted black line on the upper half of the hind margin. Hind wings paler tawny, the fringes with indistinct linear spots, the centre with eight spots; the middle one at the end of the cell, and the remainder forming nearly a circle round it, two on the costa, one in the cell near the base, and the other four curving round near the inner margin and the lower part of the hind margin." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, from the Gaboon.

IV.—TERIOMIMA SUBPUNCTATA. Figs. 11, 12.

Teriomima Subpunctata, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 364 (1887).

Exp. a little over an inch.

UPPERSIDE "white, costa blackish at the immediate base; tip blackish for one-third of the costal length, and for the upper two-thirds of the length of the hind margin; two brown spots (one at the anal angle) below.

"Underside thickly spotted with brown; fore wings with one spot in the cell and two at the extremity; a row along the costa, and two submarginal rows from the costa, the outermost consisting of six small spots, but not extending to the anal angle, and the innermost slightly oblique and consisting of four larger spots; hind wings with two submarginal rows of spots, most of which are linear, and many spots nearer the base, which might be regarded as forming two or three irregular rows, the most conspicuous being two in the cell, and a large irregular one (marked with white in the centre) which stands second from the costa." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, probably from West Africa.

GENUS CITRINOPHILA.

Citrinophila, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 367 (1887).

Subcostal nervure apparently six-branched, owing to the first discocellular nervure, as is often the case in the Lycanida, resembling a lower branch of the subcostal. First branch of the subcostal emitted before, and the second at the end of the cell, the third some distance beyond, dividing into three very short branches at the extremity, the lowest reaching the tip.

(The thick scaling of these species renders an examination of the neuration rather difficult.)

Type, C. Marginalis.

I.—CITRINOPHILA MARGINALIS. Figs. 5, 6.

Citrinophila Marginalis, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 368 (1887).

Exp. a little under an inch.

UPPERSIDE "lemon-yellow, the costa and hind margins broadly black; at the base of the fore wings the black covers even the cell, but leaves its lower and outer half free; at the extremity of the cell the black descends along the discocellular nervule, forming a small tooth; inner margin of hind wings irrorated with black.

"Underside paler yellow; fore wings with the costa indistinctly spotted with brown on the nervules, a small black dot at the upper angle of the cell, and the hind margin narrowly black: hind wings with a black dot on the subcostal nervure just before the end of the cell, and a smaller one between this and the inner margin below the cell; the rest of the wing is indistinctly irrorated with scattered black scales; hind margin with small black irregular spots on the nervules, becoming continuous beyond the middle, but again interrupted before the last spot at the anal angle.

"Antennæ ringed with white." (W. F. K., loc. cit.) Abdomen black above.

In the Collection of Henley Grose Smith, from Ashanti.

II.—CITRINOPHILA LIMBATA. Figs. 7, 8.

Citrinophila Limbata, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 368.

"Closely allied to C. Marginalis, but rather larger, and the wings rather more rounded; the upperside is of a more orange-yellow, with the borders broader, blacker, and a little more irregular. Under-surface paler than above: fore wings with the costa narrowly and irregularly black, a large square spot at the end of the cell, and the tip marked with a square black spot continuous with a slightly irregular and submacular marginal band, sparingly dusted with yellow, and continued narrowly to the anal angle: hind wings with a similar band, commencing with an irregular blotch at the tip, and narrowly continued to just within the anal angle.

"Abdomen yellow." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, from Cameroons.

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FFROM LYSENICE 17.



1.8 LIPTENA PARVA. 8 7.8 TERIOMIMA HILDEGARDA 3.4 " \$ 910 " DISPAR. 8 t & LUCIA ", PRUNNEA 1112 " "

LYCÆNIDÆ (AFRICAN).

PLATE IV.

GENUS LIPTENA.

Liptena, Westwood (anteà, p. 1).

III.—LIPTENA PARVA. Figs. 1, 2 & 3, 4 9.

Liptena Parra, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 362 (1887).

Exp. $1\frac{1}{4}$ inches.

- "Wings brown along the margins and the costa of fore wings, red at the base for half their length on the fore wings below the cell in the male, and partly including the cell in the female (in which there is a notch in the middle of the front edge of the red colouring), and for two-thirds of their length on the hind wings.
- "Under surface of female yellow; fore wings red in the same place as above; two black stripes on the costa running down to the cell, and marked outside with white before the end of the cell, where stands a large black spot, bordered with white before and behind, followed by an irregular series of about five black white-bordered spots running towards the anal angle; hind margins of both wings with a row of black spots marked within with white dashes; on the basal half of the hind wings are several large black spots, partly bordered with white, and (except those close to the base) arranged in two irregular rows. In the male the ground-colour is less defined, and the spots are larger and more irregular, the spot at the end of the cell of the fore wings and the band beyond being suffused into one large irregular blotch.

"The smallest described species, not nearly allied to any other." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, from the Cameroons. vol. 1., APRIL, 1888.

GENUS LUCIA.

Lucia, Swainson, "Zoological Illustrations," ii. p. 135 (1833); Westwood, "Genera of Diurnal Lepidoptera," p. 501 (1852).

I.—LUCIA (?) BRUNNEA. Figs. 5, 6.

Lucia (?) Brunnea, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 368 (1887).

Exp. 1 inch.

Female. Upperside "brown, an obsolete pale curved stripe running across both wings at two-thirds of their length, and expanding on the inner margin into a large yellow spot.

"Underside much paler, the band yellowish-grey, narrow and curved on the fore wings, nearly straight and uniformly broad on the hind wings; there is also a submarginal row of obsolete blackish spots indistinctly bordered with yellowish-grey on both sides on all the wings beneath." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, from West Africa.

GENUS TERIOMIMA.

Teriomima, Kirby (anteà, p. 11).

V.—TERIOMIMA (?) HILDEGARDA. Figs. 7, 8.

Teriomima (?) Hildegarda, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 367 (1887).

Exp. 1 inch.

UPPERSIDE "tawny, hind margins and tip of fore wings rather broadly brown, between which and the cell are four brown transverse stripes on the costa; they are partly connected, and below the third is a black spot at the end of the short cell.

"Underside of fore wings reddish (paler on the inner margin), with four anastomosing leaden-brown bands running from the costa near the base, not extending much below the cell; towards the tips are two oblique anastomosing

bands, branching to the fringes, which are also brown: hind wings brown, with about six rows of nearly connected red spots." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, from Ashanti.

Allied to Liptena Aslauga of Trimen, who now places the latter species in his genus D'Urbania, the type of which is D. Amakosa, Trim., but to which he now proposes to give an extension which would include most of the species hitherto referred by authors to Pentila and Liptena. (Compare Trimen, "South African Butterflies," ii. p. 214 (1887).)

VI.—TERIOMIMA DISPAR. Figs. 9, 10 & 11, 12 9.

Teriomima Dispar, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 367 (1887).

Exp. $1\frac{1}{4}$ inches.

- "Male. Upperside dark brown, fringes grey.
- "Underside paler brown, with three obsolete reddish-grey stripes in the cell, some obsolete pale dots towards the costa, and a still more indistinct double row of submarginal dots; hind wings with a red submacular band across the middle, two rows of less distinct reddish spots nearer the base, and a double row of very indistinct submarginal markings.
- "Female. Upperside brown, fore wings with a tawny stripe commencing just beyond the cell and widening towards the hind margin, which it does not quite reach.
- "Underside nearly as in the male, but with the markings much better defined, and the band of the fore wings reproduced, but paler.
- "The insects here described as sexes may prove to be distinct when more specimens are received." (W. F. K., loc. cit.)

In the Collection of Henley Grose Smith, from Cameroons (3) and Ashanti (2).

These specimens have some resemblance to Lucia Emperamus, Snellen ("Tijdschrift voor Entomologie," xv. p. 25, pl. 2, f. 1–3 (1872)), from Guinea.



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... THEIC MIMIN REASMUD \$ 7 TINGRA ABRAXA

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THE WORLD REASMUD \$ 7 TINGRA ABRAXA

MAGULATA 6

5 " 9 10 " 9

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PLATE V.

GENUS TERIOMIMA.

Teriomima, Kirby (anteà, pp. 11, 16).

VII.—TERIOMIMA ERASMUS. &. Figs. 1, 2.

Teriomima Erasmus, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 366 (1887).

Exp. $1\frac{1}{2}$ inches.

Male. Upperside yellow, more intense towards the base; anterior wings with the costa black, and irrorated with blackish at the base and over the basal and upper part of the cell; the tip and hind margin black, the latter strongly bidentate within. Posterior wings with a broad black marginal band, slightly angulated, but not indented within.

Underside pale yellow, flushed with orange towards the costa to the end of the cell on the posterior wings, and considerably beyond it on the anterior wings. Anterior wings with the costa sparingly irrorated with black, a large black spot at the tip and anal angle, and three other spots on the hind margin between; posterior wings with six black spots on the hind margin, that at the tip larger, and that at the anal angle smaller than the others.

Hab. Angola.

In the Collection of Henley Grose Smith.

Allied to T. Erastus, Hew.

VIII.—TERIOMIMA FLAVEOLA. &. Figs. 3, 4. Q. Fig. 5.

Teriomina Flaveola, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 366 (1887).

VOL. I., OCTOBER, 1888.

Exp. $1\frac{5}{8}$ inches.

Upperside very similar to *T. Erastus*, Hew., but the male is of a deeper yellow, especially at the base; the band of the anterior wings is much less deeply indented with the ground-colour, and the spots of the posterior wings are either separate or all connected in the male; and in the female, which is paler, the band is entirely connected, except that the spot at the anal angle is a little irregular.

Underside as in *T. Erastus*, but the orange extends over most of the cell in the male, and the black marginal markings of the upper side are visible in sulphur-yellow in the male.

Hab. Ashanti and Cameroons.

In the Collection of Henley Grose Smith.

IX.—TERIOMIMA ERASTUS. 9. Fig. 6.

Pieris Erastus, Hewitson, "Exotic Butterflies," III. Pieris, pl. 8, f. 51 (1866).

Liptena Erastus, Hewitson, l. c. v.; Pentila and Liptena, pl. 2, text (1873). Exp. $1\frac{1}{2}$ inches.

Upperside paler or darker sulphur-yellow, the incisions whitish, anterior wings with the costa more or less dusted with blackish; hind margin broadly black at the tip, and narrowed to the inner margin; just below the tip it is twice sharply indented by the ground-colour. Base of the anterior wings slightly tinged with deeper yellow. Posterior wings yellow, with a marginal row of six black spots, decreasing in size from the tip to the anal angle. These are often more or less confluent, especially towards the tip; and in Hewitson's type the first three are confluent.

Underside paler, with a row of separated submarginal black spots round all the wings, indented by the pale nervures, the base, especially on the anterior wings, deeply tinged with orange.

Hab. West Africa (Gaboon, Cameroons, Congo, Angola).

Hewitson's type was from the Gaboon.

In all large Collections of Exotic Butterflies.

GENUS TINGRA.

Tingra, Boisd. (anteà, p. 6).

III.—TINGRA ABRAXAS. 2. Fig. 7.

Liptena Abraxas, Westwood, in Doubleday and Hewitson's "Genera of Diurnal Lepidoptera," pl. 77, f. 5 (1852).

Exp. about $1\frac{1}{4}$ inches.

Upperside white, more or less tinged with yellow at the base, and, in some specimens of the male, also along the costa and within the apical border of the anterior wings. Anterior wings with the tip and upper half of the hind margin ashy, spotted with white on the fringes, most distinctly in the female; two ashy spots on the lower part of the hind margin. One ashy spot at the end of the cell, a second within it, and a third below it, and sometimes one or two others towards the costa. Posterior wings with a row of ashy spots on the hind margin, an ashy spot at the end of the cell, and two others nearer the base, above and below the cell respectively.

Underside similar, the tip of anterior wings not ashy, but a row of ashy spots running round the hind margins of all the wings.

Hab. Ashanti.

In all large Collections.

We have given a figure of the underside of this insect, of which Westwood has figured the upperside only.

IV.—TINGRA MACULATA. &. Figs. 8, 9. Q. Fig. 10.

Tingra Maculata, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 363 (1887).

Exp. $1\frac{1}{4}$ to $1\frac{1}{2}$ inches.

UPPERSIDE white, tinged with tawny-yellow at the base; anterior wings with the tip ashy, marked with three white spots on the costal margin, and three on the hind margin, and followed by three ashy spots (nearly confluent with the dark tip in the male) before the anal angle; four dark spots in the cell, the second transverse, the fourth at the end of the cell, rather widely separated

from the others; above the cell are two or three more spots, alternating with those in it, and below the cell is a large spot near the extremity, and sometimes a smaller one nearer the base. Posterior wings with seven submarginal spots; a spot at the end of the cell, and sometimes another obliquely below it, and a third above the middle of the cell.

Underside similar, with a double row of submarginal spots on the anterior wings, and in the male on the posterior wings also.

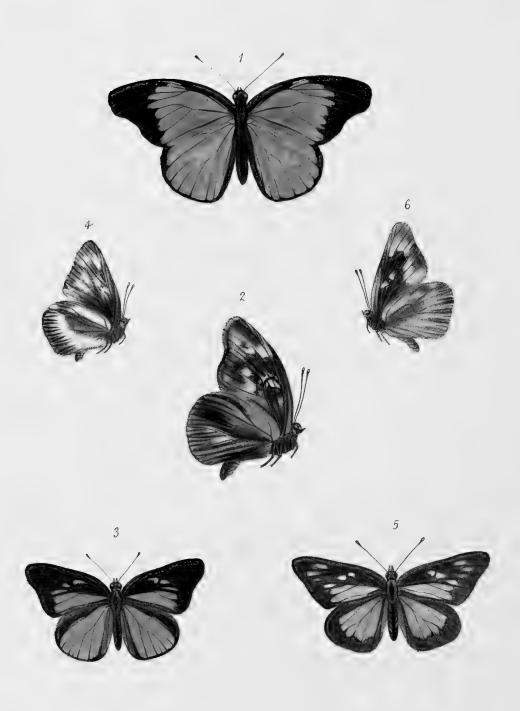
Hab. Cameroons.

In the Collection of Henley Grose Smith.

Differs from T. Abraxas in the double submarginal row of spots on the underside of the anterior wings.



AFRICAN LYCENIDE VI.



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1.2. EPITOLA URANIA, 8. 3.4. EPITOLA DEWITZI, 8 5.6. EPITOLA DEWITZI. 9

PLATE VI.

GENUS EPITOLA. (I.)

Epitola, Westwood, "Genera of Diurnal Lepidoptera," p. 470 (1852).

This genus, as at present employed, includes three very distinct groups of species, and will doubtless be subdivided when our knowledge of the African Lycanida is more complete. The first section includes Epitola Elion, Westw., the type of the genus, a large insect, with the hind margin of the anterior wings strongly emarginate; the second section may be represented by E. Ceraunia, Hew., a smaller insect, with rather long anterior wings, with the hind margin oblique and less strongly emarginate, while the third section includes numerous comparatively small species, with the anterior wings shorter, and the hind margin generally rounded.

I.—EPITOLA URANIA. &. Figs. 1, 2.

Epitola Urania, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 441 (June, 1887).

Exp. $2\frac{2}{3}$ inches.

Male. Anterior wings: costa strongly arched, tip rounded and produced, the hind margin deeply concave, and then rounded to the inner margin. Hind wings rounded, more obtusely towards the inner margin.

Upperside rich blue, shading into purple towards the edges; costa black as far as the subcostal nervure, but the blue extending nearly to its edge for about the middle third of its length; apical third of costa black, its boundary, except that the blue projects slightly into it beyond the cell, falling nearly straight to the extremity of the hind margin, where the black border narrows and disappears. Posterior wings with a narrow black border, extending round the hind and inner margins, and narrowest on the lower half of the hind margin.

Underside: anterior wings light brown varied with grey, and towards the tip, with purplish and bronzed reflections; extremity of the cell with two whitish spots, the largest within the cell, the smallest forming the third of a curved series of five spots, the other spots being bright blue; beyond these is another row of five whitish spots, two near the costa, and three towards the hind margin, the series being interrupted; but between the vacant space and the hind margin are four more whitish spots, arranged in pairs. Posterior wings iridescent-purple and yellow, the costa bright golden-yellow above the subcostal nervure to nearly half its length; between the median nervules near their origin are two whitish spots.

Hab. Cameroons.

In the Collection of Henley Grose Smith.

This beautiful species, which is one of the largest of the Lycanida, is allied to E. Elion, Westw.

II.—EPITOLA DEWITZI. 6. Figs. 3, 4. 9. Figs. 5, 6.

Epitola Dewitzi, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 442 (June, 1887).

Exp. $1\frac{3}{4}$ to nearly 2 inches.

Male. Anterior wings triangular, costa arched at the base, tip produced, hind margin slightly emarginate about the middle, and sloped gradually to the anal angle. Posterior wings rounded, curved outwards, anal angle very slightly rounded off.

UPPERSIDE: anterior wings black, with a deep blue band extending from the base between the median and submedian nervures nearly to the extremity of the wing, and a curved row of four blue spots above it, two at the end of the cell, and two linear ones between these and the larger blue space. Posterior wings deep blue, the costa and inner margin broadly and the hind margin narrowly bordered with black.

Underside: anterior wings brown, with two blue longitudinal spots at the end of the cell, and an irregular curved row of white spots near the hind margin; posterior wings brown, with a broad white subcostal band; a curved white band running from the base of the inner margin nearly round to the tip, and an oval white spot between.

Female. Wings longer, anterior wings with the hind margin oblique,

hardly emarginate; markings above similar to those of the male, but the blue colour paler; two bluish-white spots at the end of the cell, and an obsolete row of pale bluish spots curving beyond the cell from the end of the main blue stripe to the costa. Posterior wings with a uniformly broad blackish-brown border.

Underside: anterior wings nearly as in the male, but tinged with yellowish-grey towards the tip, and narrowly along the costa; posterior wings yellowish-grey, shading into light brownish in the cell.

Hab. Cameroons.

In the Collection of Henley Grose Smith.

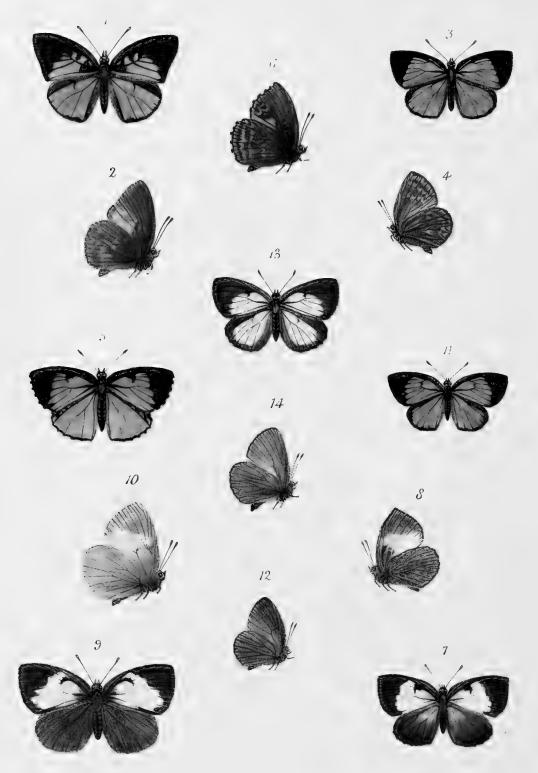
Closely allied to E. Ceraunia, Hew., from which the under surface of the male hardly differs.

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AFRICAN LYCENIDE VII.

EPITOLA II



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Hanhart lich 1 2 EPITOLA DUNIA. 8 7. 8 EPITOLA VERSICOLOR 8 9. 10 EPITOLA VERSICOLOR 9 11. 12 EPITOLA UNIFORMIS. 8

13.14. EPITOLA UNIFORMIS. 9

PLATE VII.

GENUS EPITOLA. (II.)

Epitola, Westw. (anted, p. 23).

III.—EPITOLA DUNIA. 6. Figs. 1, 2.

Epitola Dunia, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 443 (June, 1887).

Exp. $1\frac{1}{2}$ inches.

Male. Wings broad; anterior wings with the costa arched, and the hind margin nearly straight; posterior wings moderately rounded, and the anal angle only slightly rounded off.

Anterior wings black, with a large purplish-blue patch on the inner margin at one-fourth of its length, ceasing before the anal angle, and continued upwards into the cell; the base of the cell and inner margin is slightly dusted with blue. Posterior wings purplish-blue, the costa above the cell, and the inner margin black, the hind margin more narrowly black, and the upper part of the discocellular marked with black.

Underside light brown; anterior wings with a large whitish space on the hinder half of the inner margin; hind wings with scattered white scales, showing a tendency to form rows.

Hab. Cameroons.

In the Collection of Henley Grose Smith.

Allied to E. Cercene, Hew., but less blue above, and with no distinct markings on the underside.

IV.—EPITOLA MARGINATA. &. Figs. 5, 6.

Epitola Marginata, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 443 (June, 1887).

Exp. $1\frac{1}{2}$ inches.

Male. Wings with the fringes denticulated; anterior wings broad, hind margin rounded off towards the anal angle; posterior wings rather short, the hind margin gradually rounded.

UPPERSIDE: anterior wings blue, black at the base of the cell, above the cell, and at the tip and hind margin, nearly to the anal angle, and the discocellular also marked with black. Posterior wings blue, the costa above the cell, the hind margin narrowly, and the inner margin moderately bordered with black; the incisions on all the wings dusted with white.

Underside brown, dusted with white in such a manner as to form irregular obsolete zigzag lines and blotches, especially towards the inner margin of the fore wings and the hind margin of the hind wings.

Hab. Cameroons.

In the Collection of Henley Grose Smith. Allied to E. Dunia, Kirb.

V.—EPITOLA VERSICOLOR. &. Figs. 7, 8. Q. Figs. 9, 10.

Epitola Versicolor, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 444 (June, 1887).

Exp. from $1\frac{1}{4}$ to over $1\frac{1}{2}$ inches.

Male. Anterior wings rather short and broad, hind margin nearly straight, slightly rounded above the anal angle; posterior wings moderately rounded.

UPPERSIDE: anterior wings brown, darkest on the hind margin; pale blue at the base in the cell and below; the discocellular is conspicuously black; beyond the cell is a broad curved white band, narrowing from the inner margin nearly to the costa, which it does not quite reach. Posterior wings brown, pale blue in the cell and below; hind margin shading into darker brown.

Underside light brown, with numerous traces of irregular transverse pale lines; the white transverse band in the middle of the anterior wings as above, except that it is of a more yellowish-white beyond the cell and towards the costa.

Female. Upperside similar, but larger and paler. Anterior wings with the white band not extending to the inner margin; posterior wings uniform pale brown.

Underside light greyish-brown, with no yellow shade in the white band,

the discocellular is nearly surrounded with white on the anterior wings, and there are a few other indistinct whitish markings.

Hab. Cameroons.

In the Collection of Henley Grose Smith.

An aberrant species of the group of E. Cercene, Hew.

VI.-EPITOLA BADIA. &. Figs. 3, 4.

Epitola Badia, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 444 (June, 1887).

Male. Wings short, moderately broad; hind margin of anterior wings gradually curved.

UPPERSIDE blue, anterior wings with the costa above the cell, and the tip and hind margin black, narrowing to the anal angle; no black mark on the discocllular, but the median nervure with a thick blackish streak at the base. Posterior wings with the costa above the cell, the inner margin, and the upper part of the hind margin with a moderately broad black border; the lower part of the hind margin narrowly edged with black.

Underside greyish-brown, paler on the inner margin of the anterior wings, and with very slight traces of pale zigzag markings.

Hab. Cameroons.

In the Collection of Henley Grose Smith.

Allied to E. Zelza, Hew.

VII.—EPITOLA UNIFORMIS. &. Figs. 11, 12. Q. Figs. 13, 14.

Epitola Uniformis, Kirby, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 445 (June, 1887).

Exp. about $1\frac{1}{4}$ inches.

Shape of *E. Badia*, Kirb., which it much resembles; the blue is paler, especially in the female, in which sex the brown border of the posterior wings is much broader; there is a conspicuous blackish spot at the end of the cell of the anterior wings, which at once distinguishes it.

Underside uniform brown, greyer and with a pale space on the inner margin of the anterior wings in the female.

Hab. Lagos (&); Cameroons (&).

In the Collection of Henley Grose Smith.

Allied to E. Zelza, Hew., and E. Badia, Kirb.



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PLATE VIII.

GENUS TINGRA.

Tingra, Boisduval (anteà, p. 6).

III.—TINGRA LASTI. &. Figs. 1, 2. Q. Figs. 3, 4.

Exp. $1\frac{1}{4}$ to $1\frac{5}{6}$ inches.

Upperside. Orange-tawny, costa speckled with blackish, hind margins brown; in the male, the border is irregular on the posterior wings, and in the female it is reduced to a broken line, or dots, not only on the posterior wings, but even towards the hinder angle of the anterior wings. The wings are spotted with black, but not very regularly even on opposite sides of the same specimen. In the cell of the anterior wings there are several small spots near the base, an irregular spot in the middle, another at the extremity, and two below; and in the female, a row of spots runs across all the wings, starting just within the dark apex of the anterior wings; in the male these spots are smaller, and several are obsolete, so as to break the series. In the posterior wings there is a black spot at the end of the cell, a spot on the costa near the base, and one or two others nearer the inner margin.

Underside paler; no trace of a dark border; the male with a double row of spots towards the hind margin, and the female with only a single row; the other spots nearly as above.

Hab. Mombasa (Last).

In the Collection of Henley Grose Smith.

Allied to Tingra Tropicalis, Boisd. (anteà, p. 7), from Natal, but with a more distinct border, and with larger and more distinct spots.

IV.—TINGRA MOMBASÆ. &. Figs. 9, 10. Q. Figs. 11, 12.

Exp. $1\frac{1}{2}$ to $1\frac{3}{4}$ inches.

Upperside rich tawny, hind margins (and, in the male, the costa of the anterior wings) with moderately broad brown borders; anterior wings with three vol. 1., october, 1889.

black subcostal spots (only visible in the female), eight spots in the cell (one near the base, two pairs in the middle, and one at the tip); two spots below the cell, and a series crossing both wings within the border, the upper part of which is lost in the border towards the tip of the anterior wings in the male. Posterior wings with three small spots in the cell, and a larger one at the tip; the submarginal row of spots already mentioned runs round the whole wing, starting from the spot in the cell nearest the base.

Underside rather paler; the border is obsolete, and therefore the spots towards the costa and hind margin are more visible; there is a double row of submarginal spots running round all the wings.

Hab. Mombasa (Last).

In the Collection of Henley Grose Smith.

Allied to T. Amenaida, Hewitson (Pentila Amenaida, Hew., "Exotic Butterflies," V. Pentila and Liptena, pl. II. figs. 4-7 l.c. (1873)), but with more spots towards the base.

V.—TINGRA PETREIA. 9. Figs. 7, 8.

Pentila Petreia, Hewitson, "Annals and Magazine of Natural History," ser. 4, vol. 13, p. 382 (May, 1874).

Tingra Tripunctata, H. H. Druce, "Entomologist's Monthly Magazine," XXV. p. 109 (October 1888).

Exp. $1_{\overline{1}}^{1}_{\overline{0}}$ inches.

Upperside reddish-tawny, the costa and tip of anterior wings, and all the hind margins rather broadly brown; anterior wings with the cell filled up with black nearly to the middle, beyond which is a tawny space, followed by a large black spot confluent with the costa; another large black spot (detached) at the end of the cell. Posterior wings with a round black spot at the end of the cell, and two small black dots near the costa, one at one-fourth of its length, and another near the tip.

Underside. Anterior wings tawny, costa and tip brown, dusted all over with yellowish scales; and towards the tip, spotted with stone-colour, a submarginal row of not very distinct blackish spots; cell with a large black spot at two-thirds of its length, several smaller spots (not uniform on both sides) towards the base, and a large one at the end of the cell; there are also one or two less distinct black spots on the costa, above the cell, towards its extremity, and another spot (visible also on one side above) between the two lower branches of the median

nervure. Hind wings light brown with a tawny shade, two obsolete submarginal stone-coloured bands, obsoletely marked with black spots as above, but larger; a few additional small dots in the cell and towards the base, and an additional spot between the two lower branches of the submedian nervures.

Hab. Ashanti, Addah.

In the Hewitson Collection (British Museum) and in that of H. H. Druce.

The types hardly differ, except that Hewitson's is more worn. Both authors compare this insect with T. Amenaida, Hew.; it is, however, more closely allied to Liptena Parva, Kirb. (anteà, p. 15), which would be better placed in Tingra.

GENUS LIPTENA.

Liptena, Westwood (anteà, pp. 1, 16).

IV.—LIPTENA SEMIRUFA. 9. Figs. 5, 6.

Exp. $1\frac{3}{4}$ inches.

Female. Upperside. Anterior wings black, a large red blotch on the inner margin, extending upwards as far as the cell; posterior wings red, with a moderately broad black border, indented on the inside.

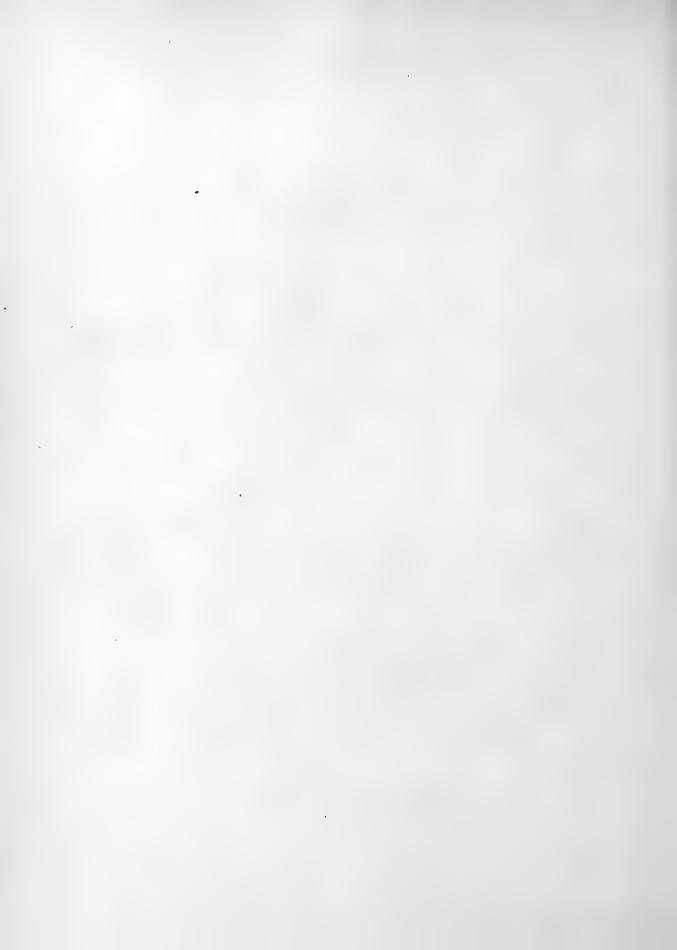
Underside. Anterior wings with the costa and hind margin black, enclosing a row of white spots, which are very irregular, and partly double on the costa, from which short black bars run irregularly downwards, the longest just beyond the cell. Posterior wings yellowish (whitish in the centre) with a black border, enclosing a double row of white submarginal spots, in addition to smaller white spots on the fringes; three short black bars run obliquely from the costa, one near the base, one at the end of the cell, and one just beyond; the last is connected with an irregular black spot. There is a large oval black spot at the end of the cell, and a round spot below the submedian nervure at half the length of the cell.

Body black, inner orbits white, legs black, spotted with white; abdomen red above.

Hab. Gold Coast.

In the Collection of Henley Grose Smith.

Allied to L. Acrea, Westw., and L. Sanguinea, Plötz, from both of which it may be distinguished by the regularity of the red blotch on the anterior wings on the upper side, and the absence of any pale markings towards the apex.





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3 + CAPHINGP NDA ALBULA.d.

E 3 PEUGEDA.

7,8.LARINOPODA EUREMA,
9,10.PSEUDERESIA ZORAIDA,
11,12. ",
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PLATE IX.

GENUS PSEUDERESIA.

Pseuderesia, Butler (anteà, p. 4).

II.—PSEUDERESIA HELENA. &. Figs. 1, 2.

Pseuderesia Helena, H. H. Druce, "Entomologist's Monthly Magazine," vol. 25, p. 108 (October, 1888).

Exp. $1\frac{3}{10}$ inches.

Upperside dull purplish-black. Posterior wings with a short red band, rather irregular on both sides, running from below the costa nearly to the inner margin; all the fringes, and the fold on the inner margin of the posterior wings, grey.

Underside dark brown, anterior wings with a double submarginal row of yellow spots, coalescing and then ceasing before reaching the hinder angle; another row of six spots, the two lowest reddish, beyond the cell, two spots on the costa nearer the base, and another at the end of the cell; posterior wings with two submarginal rows of yellow spots, and with nine larger ones, forming three rows from the base; the middle row of four spots, two near the costa, and three near the inner margin; besides these there are a few more pale dots.

Legs black, banded with yellow.

Hab. Addah, W. Africa.

In the Collection of H. H. Druce.

Shape of *P. Eleaza*, Hewitson (*Pentila Eleaza*, Hew., "Exotic Butterflies," vol. 5, *Pentila* and *Liptena*, II. figs. 11, 12 (1873)), from Old Calabar; but the latter species has a red spot above on the anterior instead of on the posterior wings, and the undersurface is quite different.

VOL. I., JANUARY, 1890.

III.—PSEUDERESIA ZORAIDA. 8. Figs. 9, 10. 9. Figs. 11, 12.

Exp. 11 inches.

Upperside reddish, anterior wings with the costa, tip, and hind margin, and posterior wings with the costa and hind margin broadly brown; incisions spotted with white. In the male, the red colour does not extend into or above the level of the cell, but in the female there is a red blotch in the cell of the anterior wings, and the red colour rises beyond the end of the cell towards the costa; on the posterior wings it extends from the inner margin, covering the lower half of the cell, and filling the whole centre of the wing in one mass.

Underside. Anterior wings in male smoky-brown, costa dusted with grey, and marked with three indistinct blackish spots; hind margins marked with a row of white spots between the nervures opposite the white spots on the fringes; a large subapical orange blotch extending from below the costa to the upper branch of the median nervure, followed by some dots connecting it with a large irregular buff blotch at the hinder angle. Posterior wings red, with a black border marked with a row of large white submarginal spots opposite the spots on the fringes; a row of black crescents and stripes dusted within with grey crosses the wing beyond the cell; within the cell is a large black spot surrounded with grey dusting; above it, on the costa, is a long black blotch, edged with whitish within; and below it is a large round spot on the inner margin, likewise ringed with whitish; near the base is a black spot on the inner margin, and a round subcostal spot, surrounded with whitish, and surmounted by a triangular white spot. In the female, the hind wings are similar, but paler, several of the markings are larger, and there is a black dot surrounded with whitish in the middle of the cell. On the anterior wings, the markings of the costa and hind margin are similar to those of the male, except that the indistinct black spots on the costa are more numerous; the disc, below and beyond the cell, is paler tawny than above, especially towards the inner margin; the apical third of the wing is blackish, crossed by an oblique oval tawny spot.

Antennæ and legs black, ringed with white.

Hab. Cameroons (types); Gaboon.

In the Collections of Mr. Henley Grose Smith and of Dr. Staudinger.

Allied to P. Libentina, Hewitson ("Exotic Butterflies," vol. 3, Pentila and Liptena, I. f. 8, 9 (1866)).

Hewitson described his *Liptena Libentina* from Old Calabar; but the species is now represented in his collection by three specimens from Gaboon and Fernando Po, which appear to belong to two different species, neither agreeing with his type, but one of them very similar to, if not identical with, our *P. Zoraida*.

GENUS LARINOPODA.

Larinopoda, Butler (anteà, p. 5).

III.—LARINOPODA PEUCEDA. &. Figs. 5, 6.

Larinopoda Peuceda, Henley Grose Smith, "Annals and Magazine of Natural History," ser. 6, vol. 3, p. 134 (February, 1889).

Exp. $1\frac{5}{8} - 1\frac{6}{8}$ inches.

Malc. Upperside. Both wings transparent white, broadly bordered on costal and outer margins of anterior and outer margin of posterior wings with greyish semitransparent black; an oblique broader band with a confluent spot at the lower end of the same colour crosses the anterior wings from the middle of the costa to a little below the middle of the outer margin; there is a large round spot of the same colour at the end of the cell of the posterior wings, partly within and partly outside it, and a smaller spot on the underside between this and the outer margin showing through; base of the same colour.

Underside. Both wings as above, but blacker, and on the posterior wings there are two small spots, one near the costa towards the base nearly obsolete, the other near the inner margin, in a line with the central spot.

Legs orange-tawny, as in most species of this genus.

Hab. Mombasa (Last).

Allied to L. Peucetia, Hewitson (Pentila Peucetia, Hew., "Exotic Butterflies," vol. 3, Pentila and Liptena, I. f. 3 (1866)), but is a larger and blacker insect.

IV.—LARINOPODA ALBULA. 6. Figs. 3, 4.

Larinopoda Albula, H. H. Druce, "Entomologist's Monthly Magazine," vol. 25, p. 108 (October, 1888).

Exp. $1\frac{1}{5}$ inches.

Male. Upperside white, anterior wings with the costa, apex, and hind margin as far as the lowest branch of the median nervure rather broadly black; posterior wings narrowly black from a little below the apex to the anal angle.

Underside: Anterior wings as above, except that there are two white stripes, separated by irregular black scaling, on the dark apex, and obsoletely continued along the hind margin as two narrower pale lines as far as the dark

border extends. Posterior wings with a rather broad dark border; all the wings with a narrow marginal line at the base of the fringes.

Antennæ black, ringed with white, the club very long and pointed, with the tip yellow; legs yellow, spotted with black.

Hab. Addah, W. Africa.

In the Collection of H. H. Druce.

Allied to L. Varipes, Kirb.; but in the latter species there is a spot in the middle of the hind wings, and the dark border is broader above.

V.—LARINOPODA EUREMA. Q. Figs. 7, 8.

Phytola Eurema, Plötz, "Stettiner Entomologische Zeitung," 41 Jahrgang, p. 199 (1880).

Exp. $1\frac{1}{2}$ inches.

Female. Upperside white, costa of anterior wings blackish for two-fifths of its length; apex blackish-brown, from a little beyond the middle of the costa, and along the hind margin nearly to the hinder angle; posterior wings with small black dots on the hind margin at the extremities of the nervures.

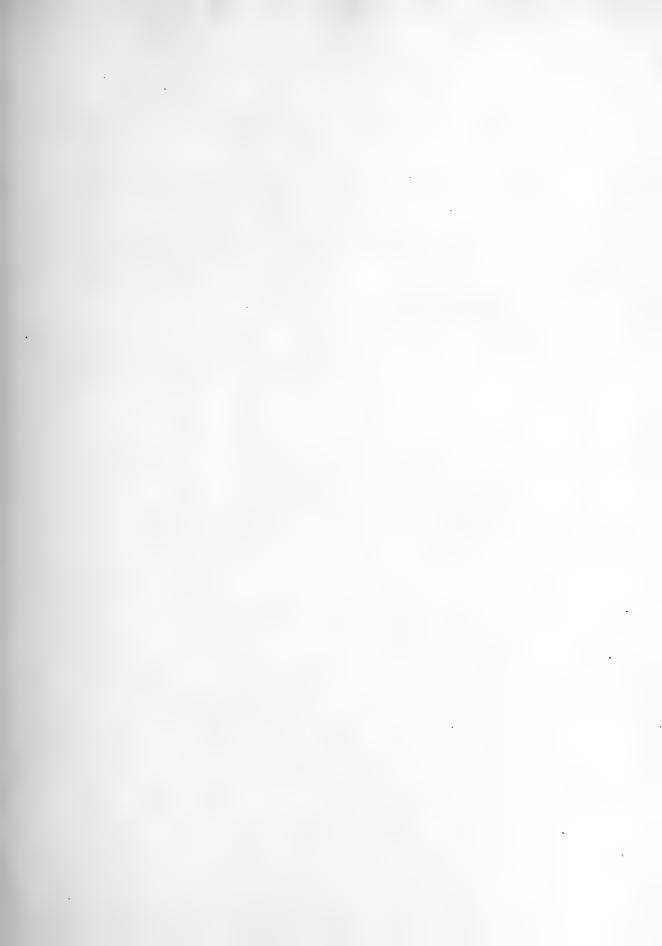
Underside white, with a black line at the base of the fringes, anterior wings with a triangular dusky spot on the costa before the middle, and with the apical patch ashy, only indicated on the costa and narrowly along the hind margin. Posterior wings with three black spots, one near the tip, the second near the end of the cell, and the third (smaller) between this and the inner margin.

Palpi and legs yellow, apical joint of the former, and tarsal joints of the latter, spotted with black.

Hab. Accra (Plötz).

In the Collection of Henley Grose Smith.

Allied to *L. Lycenoides*, Butler (Transactions of the Entomological Society of London, 1871, p. 173, pl. vii. figs. 2-5), but the latter species has no dark apex to the anterior wings above, and no spot in the cell of the posterior wings beneath.



AFRICAN LYCÆNIDÆ.X. LIFTEMA MIMACRÆA



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1 S LIPTENA FERVIDA. & 6.7 MIMAGRÆA APICALIS 39 CHARMIAN.

PLATE X.

GENUS LIPTENA.

Liptena, Westwood (anteà, pp. 1, 15, 33).

V.—LIPTENA ACRÆOIDES.

Liptena Acræa, var. Hewitson, "Exotic Butterflies," iii, Liptena, fig. 12. Liptena Sanguinea, \mathfrak{E} . Smith and Kirby, anteà, p. 2, pl. i, f. 1, 2 (1887). Exp. $1\frac{1}{2}$ to $1\frac{3}{4}$ inches.

Reddish-tawny, with black borders, and a row of two or three small separate subapical white spots near the costa of the anterior wings; there are usually four larger and more or less confluent spots in the \mathfrak{p} . Incisions white; the female with three or four submarginal white spots towards the anal angle of the anterior wings.

We are indebted to Dr. Staudinger for pointing out that the insects figured by us as the sexes of Liptena Sanguinea, Plötz, really belong to different species. L. Acrwoides is distinguished from L. Sanguinea (of which L. Anneckei, Dew., is probably a synonym) by the paler colour of the undersurface of the posterior wings, the four distinct bars on the costa (only two of which are clearly defined, and separated at their base by a white space in L. Sanguinea), and by the usually heavier spotting below the cell. These differences will be seen in our figures. L. Acrwoides varies somewhat, and has been received from the Gaboon, Cameroons, and Angola. All the specimens labelled L. Acrwa in the Hewitson Collection belong to L. Acrwoides, and not to L. Acrwa, Doubl. and Hew., or L. Sanguinea, Plötz. The insects of this section require to be collected in large numbers in different localities, as there seems to be a considerable number of closely allied species. L. Acrwoides seems to be a very common species in Angola.

In all the principal Collections.

VI.—LIPTENA FERVIDA. 8. Figs. 1, 2. 9. Fig. 3.

Exp. $1\frac{2}{3}$ to $1\frac{3}{4}$ inches.

Male. Upperside reddish-tawny, the costa nearly to the median nervure, the apical third, and the hind margin on the anterior wings black; posterior vol. 1., July, 1890.

wings with the hind margin also black. Anterior wings with a subapical row of two or three small white spots. Incisions of all the wings spotted with white.

Female similar, but paler, the subapical transverse band larger, and composed of four white or yellow confluent spots.

Underside in both sexes very similar to that of *L. Acræoides*, but with the black markings less extensive, and (in the female) with no spots on the posterior wings between the upper part of the cell and the hind margin. Towards the apex of the anterior wings, the black subcostal markings are broader and more square-cut than in the other species.

Hab. Cameroons (Preuss).

In the Collection of Dr. Staudinger.

Intermediate between L. Acreoides and the true L. Acrea, Westwood.

VII.—LIPTENA ECHO. &. Figs. 4, 5.

Exp. $1\frac{1}{5}$ inches.

Male. Upperside reddish-tawny, the hind margins, and the costa and apex of anterior wings broadly black; a large detached red spot at one-third of the distance between the end of the cell and the hind margin. The inner side of the black border is rather irregular. There is a small black crescent at the base of the posterior wings.

Underside paler tawny, shading into yellowish, apical half of costa, and hind margin of anterior wings black, spotted with white; hind margin of posterior wings black, with a double row of white spots. Costa of anterior wings with a row of seven rather irregular black bands, the second marked with a pale spot; the second, third, fifth and sixth longest; the fifth covers the end of the cell; obliquely below the sixth is a black spot on the disc. Posterior wings with three detached costal stripes above the cell, and another beyond, which commences the continuous border; another black spot at the base of the cell, another below the subcostal nervure just before it forks, another at the end of the cell, and another on the inner margin.

Hab. Gold Coast (Vray).

In the Collection of Dr. Staudinger.

Allied to, and possibly the male of, L. Semirufa (anteà, p. 33).

GENUS MIMACRÆA.

Mimacræa, Butler, "Lepidoptera Exotica," p. 104 (1872).

Anterior wings long, cell about two-fifths of the length of the wing, costa slightly serrated, the costal nervure running into it a little beyond the cell; subcostal nervure five-branched, first and second branches emitted before the cell, the third a little beyond, and the fourth and fifth separating a little beyond the origin of the third; fourth reaching the costa at or a little before the tip; upper discoidal emitted from subcostal; first discocellular very short, the second slanting inwards; median branches long, emitted at regular intervals. Posterior wings rounded, shorter than the anterior wings, the hind margin slightly sinuated, cell rather short and broad, costal nervure not reaching to apex, subcostal branches stalked; discocellulars nearly transverse, the upper shorter and slightly oblique; median branches emitted nearly at regular intervals; palpi moderately long, conical at tip, abdomen slender, legs stout: club of antennæ long, annulated, scarcely thickened.

Type Mimacrwa Darwinia, Butl., from West Africa.

I.—MIMACRÆA APICALIS. 9. Figs. 6, 7.

Exp. about $2\frac{1}{4}$ inches.

Tawny (paler in the \$\secup\$ than in the \$\secup\$), anterior wings black above the median nervure, as well as at the base and hind margin; between the branches of the median and the submedian nervures the black also extends into the disc, on at least the upper part of each cell, and there is a short black basal dash below the submedian nervure. On the hind margin, the black border runs irregularly downward, ceasing at the hinder angle of the anterior wing. The nervures in the black portion of the wing are pitchy. An oblique pale yellow stripe before the apex, divided into three or five spots by the nervures, which are here of a yellowish-brown. Posterior wings with a black basal line upon or above the subcostal, extending about half the length of the cell, and a moderately broad black border, rather irregular within, and reduced to a line beyond the anal angle, though continued thus along part of the inner margin. In the female it becomes very narrow before reaching the anal angle.

Underside. Anterior wings similar, but paler, with the border narrower, and ceasing before reaching the hinder angle, costal nervure tawny, an irregular tawny line within the cell, above the median nervure, and the oblique yellow stripe paler and rather longer. In the male it touches the tawny blotch which

fills up the outer two-thirds of the wing below the submedian nervure. Apex of the wing shading into light brown. Posterior wings crossed by a buff band; the basal area more brown, and marked with about fifteen black spots, arranged in rows from the base above the cell; within it, to its extremity; and below; besides one or two others nearer the inner margin. Marginal area greyish-brown. Head and thorax black, inner orbits white, and legs spotted with white; abdomen tawny, with about three small black streaks beneath.

Hab. Cameroons (Preuss).

In the Collections of Dr. Staudinger and Henley Grose Smith.

Closely allied to Mimacræa Darwinia, Butl.; but in that species the subapical spot is not yellow, but of the same tawny colour as the rest of the disc of the anterior wings.

II.—MIMACRÆA CHARMIAN. 2. Figs. 8, 9.

Exp. $2\frac{1}{3}$ inches.

Female. Upperside. Anterior wings brown, with a reddish-tawny band resting on the inner margin from one-third of the length of the wing nearly to the hinder angle, and narrowed suddenly before reaching the middle of the wing, beyond which it curves upward in a narrower band, slightly serrated on each side, but of nearly uniform width, almost to the costa. It is situated about half-way between the end of the cell and the apex of the wing. Posterior wings of a redder tawny, the base brown, beyond which the rest of the neighbourhood of the cell is much paler than the outer part of the wing, and marked with one or two brown spots; hind margin with a rather narrow black border.

Underside. Anterior wings paler, costa slightly dusted with black, the tawny band much indented within, and represented on the basal two-thirds of the inner margin only by a pale space; the nervures in and beyond the band are yellow, and between them run forked streaks (mostly starting from the band) to the hind margin. Posterior wings with the basal half of a pinkish-tawny, marked with about ten black spots; beyond these is a series of short curved dashes, separating the basal from the marginal portion of the wing; the latter is brown, with yellow nervures, between each of which runs a long bifid tawny stripe nearly to the hind margin. Body brown, head and thorax spotted with white; abdomen beneath yellow, spotted with black. Posterior wings with the cell much more pointed than in the other species of the genus, which gives it a still more striking resemblance to an Acrea.

Hab. Cameroons.

In the Collection of Henley Grose Smith.



AFRICAN LYCÆNIDÆ.XI. PSEUDERESIA, LIPTENA, DURBANIA.



Rose Monteiro del et lith 1890

I 2. PSEUDERESIA CATALINA, o BICOLOR, & VARIE GATA, 8. 11,12. 13.14. 3.4. LIPTENA SUBVARIEGATA.

7,8 DURBANIA CORYNETES,3 OTLAUGA, Q 9,10. ERYCINOIDES, 9 INFIMA. 15,16 . " .

LYCÆNIDÆ (AFRICAN).

PLATE XI.

GENUS LIPTENA.

Liptena, Westwood (anteà, pp. 1, 15, 33, 39).

VIII.—LIPTENA SUBVARIEGATA. &. Figs. 3, 4.

Expands 1_{10}^{4} inches.

Male. Upperside. Anterior wings triangular, broad, hardly longer than the posterior wings; black, slightly tinged with reddish in the middle.

Posterior wings with the costa brown, and hind margin black, the centre of the wing filled up with red, which forms a band from the inner margin towards the apex, and is indented on its lower edge with four large concavities.

Underside. Anterior wings black, a tawny stripe covers the lower half of the cell and the space below, and is not quite separated by an irregular band at the end of the cell from a blotch of the same colour on the disc; a white dash at the base of the costa, followed by three white costal dashes, the last of which is nearly connected with another just below and subparallel to it; a long oblique white submarginal stripe at apex.

Posterior wings reddish-tawny, a large black spot on the costa above the cell, a large white spot at apex, bordered with black, except below; the black border sends out a tooth towards the stripe descending on the other side the spot from the costa, and then narrows, throwing out only two short teeth, but about the middle of the wing it throws out a long tooth, from near the extremity of which, but not quite touching it, an inner row of connected black lunules, separated from the border itself by white ones (the first of which surmounts another large tooth), runs to the anal angle.

Hab. Cameroons (Preuss).

In the Collections of Dr. Staudinger, and Henley Grose Smith. vol. 1., october, 1890.

GENUS PSEUDERESIA.

Pseuderesia, Butler (anteà, pp. 4, 35).

IV.—PSEUDERESIA CATALINA. &. Figs. 1, 2.

Pseuderesia Catalina, Smith and Kirby (anteà, p. 4).

Exp. $1\frac{1}{4}$ inches.

Male. Wings dark brown above, posterior wings with a tawny blotch, as in the female, but sometimes very small.

Underside paler, with indistinct greyish marginal markings; anterior wings with a row of four or five small tawny spots running from the costa about the middle (sometimes only one tawny spot present); posterior wings as in the female.

Antennæ spotted with white below, and tipped with tawny.

Hab. Lagos and Sierra Leone (Preuss).

In the Collection of Dr. Staudinger.

In the specimen from Sierra Leone, the blotch on the posterior wings above is as large as in the 3, but the row of spots on the underside of the anterior wings is reduced to one. In the specimen from Lagos, the spots on the underside of the anterior wings are well marked, but the blotch on the upper side of the posterior wings is much reduced.

V.—PSEUDERESIA BICOLOR. 8. Figs. 5, 6.

Exp. $1\frac{4}{10}$ inches.

Male. Upperside brown. Posterior wings with two-fifths of the breadth from the costa orange-red, marked only by a short brown line running up into it at one-third of its length; it does not, however, extend quite to the hind margin below the apex.

Underside paler brown, anterior wings with a small tawny spot at the base, a narrow, broken, transverse tawny stripe beyond, not extending to the costa, a tawny spot at the end of the cell, and an irregular row of tawny spots running from the costa beyond, and meeting the upper projection of a large irregular tawny blotch on the inner margin, which extends from two-fifths of the length of the wing nearly to the inner margin. Posterior wings with three small tawny

spots at the base, one or two in the cell, a large one on the costa beyond the middle, and a row of four irregular linear spots at two-thirds of the length of the wing, running towards the inner margin.

Antennæ and legs ringed with white,

Hab. Accu.

In the Collection of Dr. Staudinger. Allied to Liptena Isca, Hew.

VI.—PSEUDERESIA VARIEGATA. 8. Figs. 13, 14.

Exp. $1\frac{1}{10}$ inches.

Male. Brown, wings subdentated, nervures white, anterior wings with a large tawny patch on the outer two-fifths of the inner margin, extending upwards beyond the cell, in which are several tawny marks, and there are four tawny spots, the first two larger, and connected, towards the apex of the wings.

Posterior wings brown, the centre filled up with tawny, the outer corner sending off a projection downwards, and there are one or two more tawny markings nearer the hind margin; the cell is closed by a black line.

Underside of anterior wings as above, except that the tawny spots are larger, and sometimes redder, and the space between the apical spots and the tawny space is filled up with a large black blotch. There are two large black spots in the cell, and a short black band beyond. Posterior wings, liver-coloured, irregularly spotted; about five red and two black spots towards the base; three large black and two red ones irregularly crossing the end of the cell, and a series of five black spots edged outside with red ones towards the hind margin. Fringes preceded by a double festooned line; on the anterior wings the inner line is incomplete and straight.

Hab. Gold Coast (Preuss).

In the Collection of Dr. Staudinger.

GENUS DURBANIA.

Durbania, Trimen, "Transactions of the Entomological Society of London," ser. 3, vol. 1, p. 401 (1862); "Rhopalocera Africæ Australi," part 2, p. 282 (1866); "South African Butterflies," vol. 2, p. 213 (1887).

Type Durbania Amakosa, Trim., from South Africa.

Teriomima (?) Hildegarda, Kirb. (anteà, p. 16), may be included in this genus.

I.—DURBANIA OTLAUGA. 9. Figs. 9, 10.

Exp. $1\frac{1}{2}$ inches.

Female. Upperside fulvous, with rather broad brown hind margins; on the anterior wings, the base, the costal region, including the whole of the cell, and a spot below the origin of the lowest median nervule, are brown.

Underside brown, darker towards the base, the costa of anterior wings and all the hind margins brown mottled with yellowish, disc of anterior wings tawny, edged with blackish, base of cell black, and three black transverse spots in or beyond the cell; a rather indistinct black line parallel with the upper part of the hind margin; posterior wings with orange-tawny transverse macular bands, the last unbroken; the latter is followed by a blackish band, and there is a narrower and more indistinct blackish line between this and the hind margin.

Hab. Cameroons.

In the Collection of Dr. Staudinger.

Possibly the Q of D. Hildegarda.

 ${\bf Dr.\,Staudinger\,\,regards\,\,this\,\,species\,\,as}\,\, {\it Liptena\,\,Girthi}, {\bf Dew}, {\bf but\,it\,\,appears\,\,to\,\,us\,\,to\,\,be\,\,different}.$

II.—DURBANIA INFIMA. . Figs. 15, 16.

Exp. 1 inch.

Female. Upperside brown, anterior wings with a tawny blotch standing on the inner margin, and occupying most of the disc below the cell, beyond which it is produced towards the costa; posterior wings with the basal portion filled up with tawny, but leaving the apex, the marginal third of the wing, and the greater portion of the inner margin free.

Underside with the tawny blotch on the anterior wings, as above, but paler,

and the cell blackish, with two transverse tawny markings; the rest of the wings indistinctly mottled with brown and tawny.

Hab. Sierra Leone.

In the Collection of Henley Grose Smith.

Allied to the last species, which differs in the distinct red spotting of the undersurface of the posterior wings.

III.—DURBANIA ERYCINOIDES. 9. Figs. 11, 12.

Exp. $1\frac{1}{6}$ inches.

Upperside brown, anterior wings with a large tawny blotch extending along the inner margin, almost from the base to nearly the hinder angle; above the submedian nervure it rapidly contracts, but curves up rather irregularly, beyond the cell to three-quarters of the width of the wings, and there are traces of two paler spots between its termination and the costa. Posterior wings with the centre filled up with tawny, the tawny stripe filling up the lower part of the cell being twice interrupted.

Underside brown, with the tawny blotch on the anterior wings as above, but not extending so far towards the base as on the upper side. There is a double row of submarginal buff spots on all the wings, ceasing before the hinder angle on the anterior wings, several buff spots in the cell and near the base on all the wings, and an irregular row of large ones, slightly tinted with yellow, beyond the middle of the posterior wings.

Antennæ tipped with tawny.

Hab. Cameroons.

In the Collection of Dr. Staudinger. No near ally. The sexes do not differ.

IV.—DURBANIA (?) CORYNETES. &. Figs. 7, 8.

Exp. $\frac{3}{4}$ of an inch.

Male. Upperside dark brown, hind margins subdentate. Costa of posterior wings with a broad red band, expanding from the base, but ceasing before it reaches the apex.

Underside. Anterior wings black, the margins sprinkled with greyish. vol. 1., october, 1890.

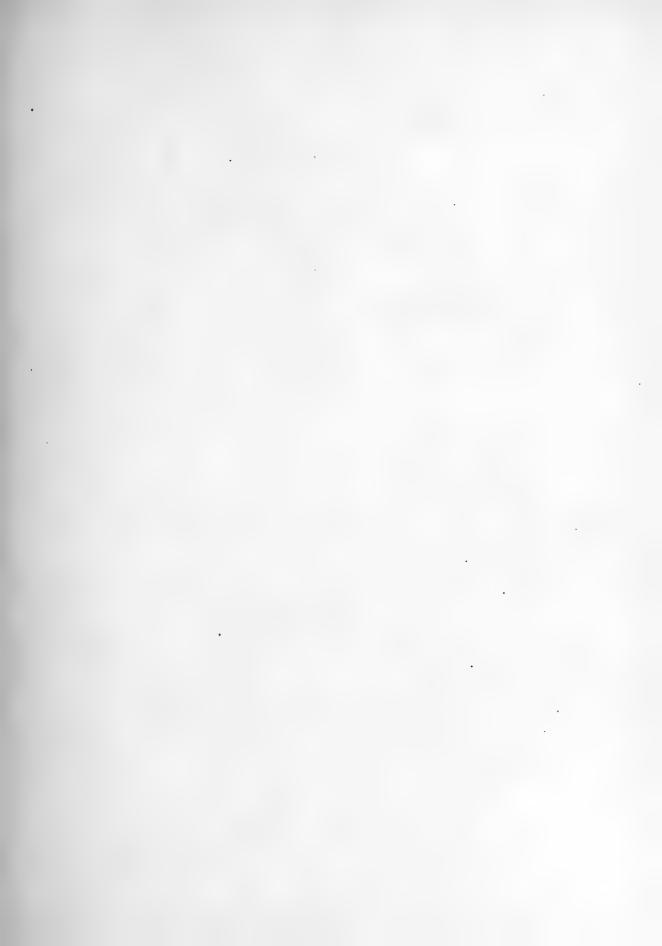
Hind wings tawny-grey, with indistinct blackish markings; before the fringes is a festooned black line.

Antennæ slender, white, with the joints black, ending in a very large abrupt black club.

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

This species will probably form a new genus.



AFRICAN LYCENIDE. XII. ALLONYING PERTILA



Rose Monteiro del. et hth. 1890.

1.2. ALLOTINUS ZYMNA. 7, 8. PENTILA FLAVICANS. 9

3.4. A. SIMILIS.

5.6 PENTILA FLAVICANS, 6. 11,12.P. FERRYMANI

Hanhart imp

.. 9,10.P. SOXAUXII

LYCÆNIDÆ (AFRICAN).

PLATE XII.

GENUS ALLOTINUS.

Allotinus, Felder, "Reise der Fregatter Novara," Lepidoptera, II., p. 285 (1865).

I.—ALLOTINUS ZYMNA. Figs. 1, 2.

Miletus Zymna, Westwood, in Doubleday and Hewitson's "Genera of Diurnal Lepidoptera," vol. 2, p. 502, pl. 76, fig. 7 (1852).

Exp. $1\frac{1}{2}$ inches.

UPPERSIDE white. Anterior wings with the costa above the cell, and the apex and hind margin broadly black, diminishing to the hinder angle. Posterior wings longer than the anterior wings, being produced in the middle of the hind margin, which is more or less broadly and completely bordered with ashy.

Underside. Anterior wings white, costa and hind margin bordered with ashy; two ashy spots in the cell. Posterior wings ashy, with darker bands and markings, more or less anastomosing, and slightly bordered with whitish.

Hab. Common in West Africa, and rather variable in size and distinctness of markings.

In all the principal Collections.

II.—ALLOTINUS SIMILIS. Figs. 3, 4.

Allotinus Similis, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 282 (1890).

Exp. $1\frac{1}{6}$ inches.

Upperside as in A. Zymna, Westw., but posterior wings less produced.

Underside. Anterior wings white, grey towards the costa and hind margin, with two grey transverse oval spots in the cell, and two white submarginal vol. 1., January, 1891.

festooned lines towards the hind margin. Posterior wings pearly grey, with six or seven white transverse lines formed of connected lunules.

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

GENUS PENTILA.

Pentila, Doublebay, anteà, p. 4.

III.—PENTILA FLAVICANS. 8. Figs. 5, 6. 9. Figs. 7, 8.

Exp. $1\frac{1}{4}$ inches.

.Upperside yellow, paler in the male than in the female; the apex of the anterior wings (more broadly on the costa than on the hind margin) and the lower part of the hind margin of the posterior wings bordered with blackish.

Underside yellow. Anterior wings with blackish markings as in *P. Ferrymani*, but less extensive. Posterior wings buff with broader and more irregular brown bands than in *P. Ferrymani*, those between the cell and the submarginal line broadly interrupted beyond the cell.

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

IV.—PENTILA FERRYMANI. Figs. 11, 12.

Exp. $1\frac{1}{2}$ inches.

Upperside white. Anterior wings with a broad blackish band on the base of the costa, invading the upper part of the cell, and extending rather obliquely downwards a little beyond it. Apex of the wings black, the inner edge scalloped; the dark colour extending as far as the lowest median nervule. Posterior wings white, the bars of the underside showing through, a black line at the base of the fringes on the lower half of the inner margin.

Underside. Anterior wings white, with longitudinal white markings in the basal band, the apical markings consisting of a submarginal line to the lowest submedian nervule, an inner line, extending to the upper submedian, and continued by a spot below the middle one, and an inner irregular band to the upper submedian. Hind wings dull white, with seven transverse brown lines, more or less waved, and an eighth at the base of the fringes; some of the nervures are also brown.

Face white, black in the middle, palpi black at the tip; thorax black, abdomen white, legs yellow, tarsi spotted with black.

Hab. Lokaja (Captain Ferryman).

In the Collection of Henley Grose Smith.

GENUS LARINOPODA.

Larinopoda, Butler (anteà, pp. 5, 37).

VI.—LARINOPODA SOYAUXII. Figs. 9, 10.

Liptena Soyauxii, Dewitz, "Nova Acta Academiæ Cæsareæ Leopoldino-Carolinæ Germanicæ Naturæ Curiosum," vol. 41, pt. 2, p. 201, pl. 2, fig. 10 (1880).

Exp. $1\frac{1}{2}$ inches.

Upperside white. Anterior wings with base of costa, and an apical patch, longer on the inner margin than on the costa, ashy; hind margin of posterior wings with the fringes of the lower part of the hind margin dusky, and indications of dusky dots at the ends of some of the nervures.

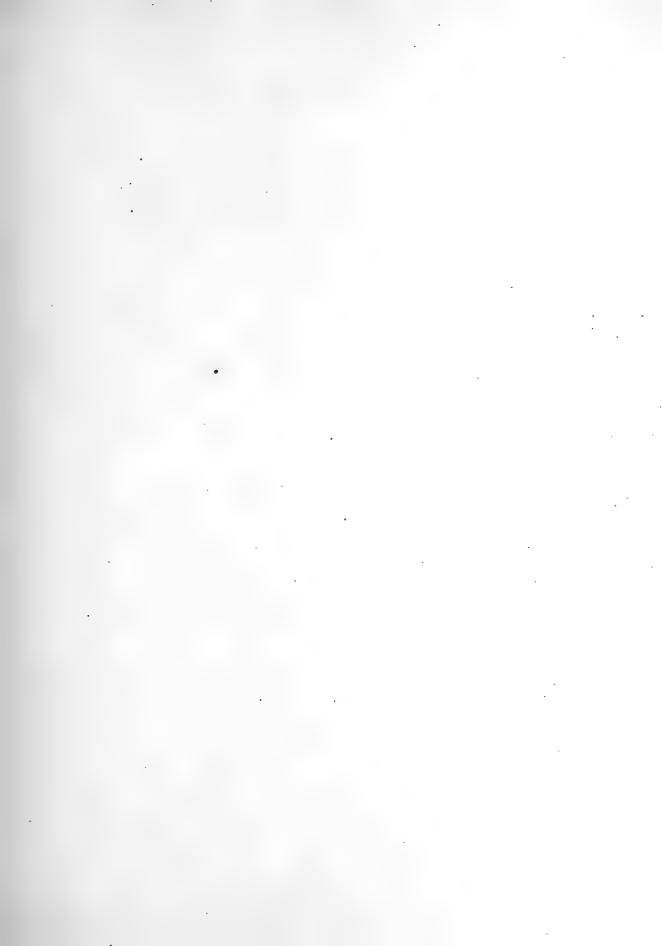
Underside white. Anterior wings with the base of costa, and the apex yellowish-grey, the apical patch intersected by two short but rather broad white lines; on the costa, just beyond the upper end of the cell, is a large blackish blotch. Posterior wings white, with a yellowish-grey submarginal line of connected sagittate marks, a short band of the same colour within it, running from the anal angle, where it connects itself on the suffused inner margin with another oblique band running from the tip to the inner margin. Nearer the base is a large black spot on the costa, and a dusky one outside it; below the former is another black spot in the cell, and below the cell a smaller dot.

Legs yellow, tarsi blackish.

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

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AFRICAN LYCAENIDAE XIII. EPITOLA III.



M Horman, Fisher del. et lith. 1890

1.2. EPITOLA PINODES.

3.4. E.STAUDINGERI.

5.6. E.ZELICA.

7.8. E. LEONINA.

9,10. E. BADURA.

11,12 .E. PERDITA.

Hanhart imp

LYCÆNIDÆ (AFRICAN).

PLATE XIII.

GENUS EPITOLA. (III.)

Epitola, Westw. (anteà, pp. 23, 27).

VIII.—EPITOLA PINODES. 9. Figs. 1, 2.

Epitola Pinodes, H. H. Druce, "Annals and Magazine of Natural History," ser. 6, vol. 3, p. 24 (January, 1890).

Exp. $1\frac{1}{4}$ inches.

Female. Upperside brown.

Underside light rufous-brown, anterior wings with the lower two-thirds filled up with blackish, nearly to the hind margin; inner margin grevish-brown; fringes blackish. Posterior wings uniform in colour.

Antennæ ringed with white, and tipped with reddish.

Hab. Sierra Leone (Preuss) and Lagos.

In the Collections of Dr. Staudinger and of Mr. H. H. Druce.

Not closely allied to any other species. Mr. Druce describes the male from Lagos. It appears only to differ from the female, as above described, in being slightly scaled with blue above.

IX.—EPITOLA STAUDINGERI. 8. Figs. 3, 4.

Epitola Staudingeri, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 271 (September, 1890).

Exp. $1\frac{1}{3}$ inches.

"Male. Upperside bright blue, anterior wings with the costa, apex, and hind margin narrowly black; a very large oblong black blotch projects into the wing from the lower part of the hind margin, filling up the whole space nearly to the cell, from the inner half of the upper discocellular nervure to below the VOL. I., APRIL, 1891.

X = X

lowest branch of the median nervure. Posterior wings blue, with the costa, inner margin, and fringes black.

"Underside uniform greyish-brown, without markings. Legs brown, ringed with grey." (Kirby, loc. cit.)

Hab. Sierra Leone (Preuss).

In the Collections of Dr. Staudinger and of Mr. P. Crowley.

A large and handsome species, with no very near ally.

X.—EPITOLA ZELICA. 9. Figs. 5, 6.

Epitola Zelica, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 272 (September, 1890).

Exp. $1\frac{1}{4}$ - $1\frac{1}{3}$ inches.

"UPPERSIDE light blue, with a purplish shade in some lights. Anterior wings with the costa above the cell, and the apex broadly blackish-brown, the dark colour diminishing triangularly to the hinder angle. Posterior wings with the costa above the cell, the inner margin, and the hind margin (narrowly) blackish-brown.

"Underside white, with an obsolete straight pale yellowish line, and two or three obsolete zigzag lines between this and the cell. In the female these indistinct markings are wanting, and there is only a blackish line at the base of the fringes of the anterior wings, which is also present in the male." (Kirby, loc. cit.)

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

Allied to $E.\ Zerina$, Hew.; but in that species the upperside is of a deeper blue, and the underside is much more heavily marked.

XI.—EPITOLA DUNIA. Q. Figs. 7, 8.

Epitola Dunia, Kirby (anteà, p. 27, pl. vii. figs. 1, 2) (3).

Epitola Leonina, pl. xiii. figs. 7, 8 (see Staudinger).

Exp. $1\frac{1}{4}$ inches.

Female. Upperside purplish-blue, with very broad dark brown borders, the blue colouring only extending to the boundaries of the wings at their bases, and along the inner margin of the anterior wings.

Underside greyish-brown, with obsolete grey markings; anterior wings with three rows of grey lunules converging outwardly; the first submarginal, and the third uniting with the second at about the middle of the wing, below which the lunules are larger, more diffused, and whiter, ending in an irregular pale blotch on the inner margin, within the hinder angle; posterior wings very indistinctly scaled here and there with grey.

Antennæ black, ringed with white, and tipped with fulvous; body greyishbrown, orbits whitish, thorax probably blue above in fresh specimens; legs brown above.

Hab. Cameroons.

In the Collections of Dr. Staudinger and of Mr. H. Grose Smith.

We are glad to have an opportunity of figuring the female of this interesting species from a specimen belonging to Dr. Staudinger. We regret that through some error in numbering, the name *E. Leonina* was incorrectly applied to the specimen, and it has consequently been figured under that name on the accompanying plate.

XII.—EPITOLA BADURA. &. Figs. 9, 10.

Epitola Badura, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 271 (September, 1890).

Exp. $1\frac{1}{3}$ inches.

- "Male. Anterior wings rather pointed; posterior wings rounded.
- "Upperside deep blue. Anterior wings with the costa (broadly) apical third, hind margin, and a basal stripe on the lower part of the cell, black; inner margin with a few coppery-green scales; posterior wings with the costa broadly and hind margin narrowly black.
- "Underside greyish brown, with a row of submarginal lunules of greyish dusting, within which is a broader stripe of the same kind; across the wings runs an irregular series of lines and zigzags of greyish dusting." (Kirby, loc. cit.)

Hab. Cameroons.

In the Hewitson Collection of the British Museum as the male of E. Cercene, Hew.; and in that of Mr. H. Grose Smith.

Allied to E. Dunia, Kirb.; but of a deeper blue, and without the oblique pale zigzag line on the underside of the anterior wings.

XIII.—EPITOLA PERDITA. 6. Figs. 11, 12.

Epitola Perdita, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 274 (September, 1890).

Exp. rather over an inch.

- "Male. Anterior wings rather pointed, with the hind margin oblique; hind wings oblong, nearly rectangular.
- "Upperside black. Anterior wings rich blue from below the cell to the inner margin, nearly to the hind margin; posterior wings with a large blue patch, filling up two-thirds of the lower part of the wing, but nowhere extending to the margins.
- "Underside. Anterior wings slate-colour, with a pale grey spot at the end of the cell, and two more, nearly connected, near the hinder angle; apex reddish, edged by a submarginal coppery-green line from near the apex to the middle of the hind margin. Posterior wings reddish, shading into buff towards the base, with a submarginal row of silvery-green lunules edged with black within, and (less distinctly) without. A Y-shaped series of silvery-green markings edged with black lines, not extending to the costa, across the middle of the wing." (Kirby, loc. cit.)

Hab. Cameroons.

In the Collection of Mr. H. Grose Smith.

A comparatively small insect, differing considerably in shape and markings from the other species of the genus. It is perhaps not a true Epitola.



LETTER TORK MILES AND PSEUDERESIA.



1 × PSEUDERESIA I FBORA 6 7,8 ESEUDERESIA CELLULARIO. 0 c.4 similis. 0 s.0 s. DINORA 6 be e e ellularis 6 m. 1. DINORA 6

15.14 PCEUDERESIA TUREATA 6

LYCÆNIDÆ (AFRICAN).

PLATE XIV.

Pseuderesia, Butler (antea, pp. 4, 35, 44).

VII.—PSEUDERESIA DEBORA. 6. Figs. 1, 2.

Pseuderesia Debora, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 264 (September, 1890).

Exp. $1\frac{1}{10}$ inches.

"Male. UPPERSIDE dull black, the incisions scaled with white; posterior wings with a large orange blotch extending from the second submedian nervule to the inner margin just above the anal angle.

"Underside. Anterior wings more of a slate-colour, costa and hind margin dusted with grey, inner margin paler, with a whitish blotch at the hinder angle; three red spots placed obliquely near the tip of the wings. Posterior wings dull black dusted with grey, a broad red band, formed of three nearly connected spots, crosses the middle of the cell, but does not extend to the costa or inner margin; within this is a row of smaller spots, three red and two black, placed alternately; and at the base is another red spot. Beyond each of the upper and lower red spots of the band stands a black spot, and after these another row of three disconnected red marks, a large one near the costa, a line closing the cell, and a small spot below; beyond the line is another large red spot. Beyond these is a series of seven red spots edged within with black ones (and slightly edged with black on the outside too), one on the costa, three connected spots, placed much nearer the hind margin, and another series of three connected spots, running towards the anal angle. (Kirby, loc. cit.)

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

VIII.—PSEUDERESIA TURBATA. 8. Figs. 13, 14.

Pseuderesia Turbata, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 263 (September, 1890).

Exp. 1 inch.

- "Male. Upperside reddish-tawny, the costa and apex of anterior wings, and the hind margins rather broadly brown.
- "Underside paler tawny, anterior wings with two black spots in the cell, the costa irregularly black, and throwing out a broad band at the end of the cell; the paler apex is cut off by another oblique irregular band, and the costa and the space between this band and the hind margin are likewise spotted with black. Fringes black, and a submarginal black line on the upper part of the wing.
- "Posterior wings more buff; two spots on the costa above the cell, one large spot above and two in the cell, which is itself closed by a black line, and three spots below the cell; the rest of the wing is marked with large irregular black blotches. The black fringes are preceded by a zigzag black line." (Kirby, loc. cit.)

Hab. Cameroons (Preuss).

In the Collection of Dr. Staudinger. Allied to P. Parva, Kirb., and P. Petreia, Hew.

IX.—PSEUDERESIA SIMILIS. 9. Figs. 3, 4.

Pseuderesia Similis, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 264 (September, 1890).

Exp. 1 inch.

- "Female. Upperside nearly as in L. Turbata, but the costa of the posterior wings brown for two-thirds of its length.
- "Underside. Anterior wings red; costa black for one-third of the breadth of the wing to beyond the cell; then the reddish space runs up, separating it from the apical area, which is marked with two much dentated grey lines; the border itself is grey, edged within by a black line on its upper half.

Posterior wings grey, with a black spot on the costa, two very large subcostal spots, three in the cell, the last linear, closing it, and three below;

the marginal area is occupied by three rows of black zigzag spots separated by two rows of grey ones; fringes grey, edged within by a black and then by a grey line." (Kirby, loc. eit.)

Hab. Cameroons (Preuss).

In the Collection of Dr. Staudinger.

This might be the female of L. Turbata; but the marginal markings of the posterior wings beneath are very different.

X.—PSEUDERESIA CELLULARIS. &. Figs. 5, 6. 9. Figs. 7, 8.

Pseuderesia Cellularis, Kirby, "Annals and Magazine of Naturai History," ser. 6, vol. 4, p. 262 (September, 1890).

Exp. $1\frac{1}{4}$ inches.

- "Male. Upperside rich tawny, the base and costa of the anterior wings, and the inner portion of the posterior wings irrorated with brown; apical third of anterior wings, and the hind margins of all the wings rather broadly bordered with black. Anterior wings with some small spots towards the base, a very large one at the end of the cell, and a few others towards the dark border, from which the larger ones are hardly separated.
- "Underside. Anterior wings with the costa, apex and hind margin blackish, densely irrorated with yellow; the lower part of the base is of a dull black, the disc being fulvous. The spot at the end of the cell is well-marked, there is an oblique row of large connected spots towards the apex, beyond the cell, and a row of small sagittate submarginal black spots before the fringes. Posterior wings dirty yellow, with a circle of five large round spots near the base, having a smaller one in the centre; besides these, there is a large one on the middle of the costa, and a small one on the middle of the inner margin; hind margin preceded by a festooned black line, within which is a row of large spots.
- "Female. Upperside similar, but of a paler fulvous, with narrower borders, and with fewer traces of the submarginal black spots.
- "Underside of a clearer yellow, with the spots and black markings smaller; on the posterior wings, the central spot in the circle is absent." (Kirby, loc. cit.)

Hab. Cameroons.

In the Collection of Dr. Staudinger. Allied to P. Parva, Kirb.

XI.—PSEUDERESIA DINORA. 6. Figs. 9, 10. 9. Figs. 11, 12.

Pseuderesia Dinora, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 265 (September, 1890).

Exp. $1\frac{1}{4}$ inches.

- "UPPERSIDE. Reddish-tawny (lighter in the female than in the male) with the base and costa blackish, and the apex of anterior wings broadly and the hind margin below, and that of the anterior wings rather narrowly black. Cell of the anterior wings closed by a large round black spot, not separated from the black colour of the costa; that of the posterior wings closed by a short black bar.
- "Underside. Anterior wings mostly black, costa irrorated with pale yellow in patches. Apex with a large yellow blotch, from which smaller yellow spots extend down the hind margin; disc towards the hinder angle with a large fulvous blotch, spotted and irrorated with black.
- "Posterior wings grey, yellow at the base and with a yellow blotch at the tip; between this and the anal angle is a thick black festooned submarginal line, enclosing three small yellow spots. Within this are two large red spots, and within these, an angulated row of seven large spots from the costa to the inner margin; the third is red, and adjoins a black spot, within which again is a large black spot closing the cell. In the cell is a small spot, and there are two or three more large and small ones towards the costa, and again towards the inner margin.
- "In the female the markings are rather more suffused, and one of the large spots on the costa of the posterior wings near the base adjoins a red dot." (Kirby, loc. cit.)

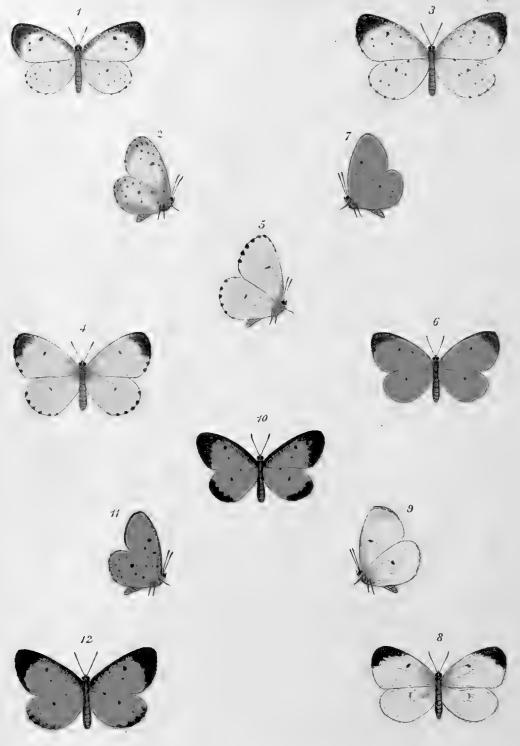
Hab. Cameroons.

In the Collection of Dr. Staudinger.

Very distinct from the other species of the group of P. Parra by the three large red spots on the underside of the posterior wings.



AFRICAN LYCZENIDZE.XV. TINGRA, PSEUDERESIA



Middlesson an et lith.

M&N.Hanhart imp

1,2 TINGRA LAURA, 8 8,9 TINGRA FATIMA, 9 10,11 "PREUSSI, 8 4.5 "LAVINIA, 8 12 " ", 9 6,7 PSEUDERESIA PAUCIPUNCTATA, 9

LYCÆNIDÆ (AFRICAN).

PLATE XV.

GENUS TINGRA.

Tingra, Boisduval (anteà, pp. 6, 31).

VI.—TINGRA LAURA. 8. Figs. 1, 2. 9. Fig. 3.

Tingra Laura, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 267 (September, 1890).

Exp. $1\frac{1}{4}$ to $1\frac{1}{2}$ inches.

- "Male. Upperside white, tinged with tawny at base. Anterior wings, costa irrorated with black, apex ashy to the lowest submedian nervule, its upper part edged within with three black spots, nearly lost in the ashy colouring; another spot at end of cell, two small ones in the cell, on one side only, and two on the disk opposite the lowest part of the border; posterior wings with a spot on the costa above the cell, and another at its extremity; other spots on the undersurface showing faintly through.
- "Underside white, tinged with yellow on the costa and at the apex of the anterior wings, and on the posterior wings, chiefly at base and apex; hind margins spotted with black on the nervures; anterior wings with a row of spots above the cell (only one distinct, the costa being irrorated with black), one at the end of the cell, and two submarginal rows at the apex, the outermost (nearly straight) of three larger, and the innermost (oblique) of four smaller spots; posterior wings with a small spot at base of cell, a large one on the costa above the cell, a small one below the cell, and another at its extremity, beyond which is an angulated row of six spots running from the costa, and a shorter row of three between the upper ones and the apex.
 - "Antennæ black, tipped with tawny in both sexes.
- "Female. Upperside white, apex of anterior wings rather broadly ashy, but this colour ceases on the hind margin at the lowest median nervule; a conspicuous black spot at the end of the submedian nervure, and of all the nervures

of the posterior wings, except the first branch of the subcostal; the only distinct spots on the upperside are those at the end of the cells, and a small one in the cell of the anterior wings; but some of the others are also slightly indicated.

"Underside white, the ends of the nervures marked with small black spots. Anterior wings with a row of four small subcostal spots, two spots in the cell besides the larger one at the apex, and another in the fork of the two lowest median nervules. Posterior wings with a large spot above the middle of the cell, a small one at the base of the cell, a large one at its extremity, and one in the fork of the nervures below; a submarginal row of six small spots, angulated outwards in the middle, commencing with a spot larger than the others on the costa." (Kirby, loc. cit.)

Hab. Lagos.

In the Collection of Dr. Staudinger.

VII.—TINGRA LAVINIA. 6. Figs. 4, 5.

Tingra Lavinia, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 267 (September, 1890).

Exp. $1\frac{1}{4}$ inches.

"Male. White, with rather large black spots on the costa towards the apex of anterior wings, at the ends of all the cells, at the ends of the nervures on all the hind margins, and one nearer the base above the cells; under this, on the anterior wings only, is occasionally another spot in the cell on the underside; extreme base of the wings slightly stained with yellow; apex of anterior wings slightly bordered with ashy above." (Kirby, loc. cit.)

Hab. Gaboon, Ogowe.

In the Collections of the British Museum and of Dr. Staudinger. Allied to T. Torrida, Kirb., but a larger, paler, and broader-winged insect.

VIII.—TINGRA FATIMA. Q. Figs. 8, 9.

Tingra Fatima, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 268 (September, 1890).

Exp. $1\frac{1}{4}$ inches.

"UPPERSIDE white, slightly stained with orange at the base of the costa.

Anterior wings with the apex dark ashy to below the upper submedian nervule; a large black spot at the end of the cell on all the wings.

"Underside white, with black discoidal spots, and a black line at the base of the fringes; within it is a second on the upper half of the anterior wings." (Kirby, loc. cit.)

In the Collection of Dr. Staudinger.

The sexes do not differ.

IX.—TINGRA PREUSSI. &. Figs. 10, 11. 9. Fig. 12.

Pentila Preussi, Staudinger, "Exotische Schmetterluge," p. 267 (1888). Exp. $1\frac{1}{4}$ to $1\frac{1}{2}$ inches.

Upperside tawny, anterior wings irrorated with brown along the costa, and hind margin with a moderately broad brown border, diminishing to the hinder angle, and extending to the fringes. Postcrior wings with a moderately broad band (reduced in a to a brown irroration); fringes tawny. All the wings with a blackish spot at the end of the cells; anterior wings more or less distinctly spotted in the cell, and with one spot below; posterior wings with a small spot on the costa.

UNDERSIDE tawny, without borders, irrorated with brown on the posterior wings, and on the costal region of the anterior wings; all the wings with black spots at the end of the cells; anterior wings with at least two other distinct spots in the cell, and one or more below; fringes black; posterior wings with a large spot above and below the cell, a small one at its base, and a curved row of small spots between the cell and the hind margin, of which traces are also visible on the anterior wings of \mathfrak{g} . Fringes concolorous.

Hab. Sierra Leone.

The sexes are very similar.

In the Collections of Dr. Staudinger and of Mr. Henley Grose Smith.

Closely allied to T. Petreia, Hew. (anteà, p. 22), of which it may be a larger and paler variety.

X.—TINGRA PAUCIPUNCTATA. Q. Figs. 6, 7.

Pseuderesia Paucipunctata, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 263 (September, 1890).

Exp. $1\frac{1}{4}$ inches.

- "Female. Upperside tawny, anterior wings with the apex blackish, from two-thirds of the length of the costa to two-thirds of the length of the hind margin, beyond which it is continued as a narrow line to the hinder angle. Posterior wings with the fringes blackish; a large spot at the end of the cell on all the wings.
- "Underside tawny-yellow, with the costa and apex of the anterior wings, and the whole of the posterior wings irrorated with brown; besides the spots closing the cells, there is one in the cell of the anterior wings, and a smaller one above the cell of the posterior wings; posterior wings with very indistinct traces of four submarginal dusky spots, one towards the apex, and the other three towards the anal angle." (Kirby, loc. cit.)

Hab. Cameroons.

In the Collection of Dr. Staudinger.

This species, though at first described as a *Pseuderesia*, and figured under that name on our plate, evidently belongs rather to *Tingra*, and, like *T. Preussi*, is allied to *T. Petreia*.



AFRICAN LYCZENIDZE. XVI.



M Horman Fisher del et lith.

Hanhart imp

3,4 " OPACA 7,8

9,10 DURBANIA GERDA.

1, 2 LARINOPODA SYLPHA. 5, 6 TERIOMIMA DELICATULA.

" DECIPIENS SERENA. 11,12

LYCENIDE (AFRICAN).

PLATE XVI.

GENUS LARINOPODA.

Larinopoda, Butler (anteà, pp. 5, 37, 51).

VII.—LARINOPODA SYLPHA. Figs. 1, 2.

Larinopoda Sylpha, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 266 (September, 1890).

Exp. 1 inch.

- "Semitransparent white, with iridescent-ashy borders along the costa of the anterior wings, and all the hind margins, ceasing at the anal angle of the posterior wings; the costal border of the anterior wings sends off a projection at the end of the cell, most strongly marked in the female.
- "Antennæ black, ringed with white, club long, slender, pointed. Legs and undersurface of abdomen yellow.
 - "Sexes nearly similar.
- "Differs from our figure of L. Muhata, Dew. & (Rhop. Ex., Afr. Lyc. pl. ii. figs. 1, 2) by the absence of the black spot on the posterior wings." (Kirby, loc. cit.)

Hab. Barombi, Cameroons (Preuss).

In the Collections of Dr. Staudinger and H. Grose Smith.

VIII.—LARINOPODA OPACA. Figs. 3, 4.

Larinopoda Opaca, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 266 (September, 1890).

Exp. 1 inch.

"Opaque white, with rather broad brown borders on the costa of anterior wings, and on the hind margins of all the wings; a large oval spot at the end vol. I., JANUARY, 1892.

of the cell of the posterior wings. On the undersurface the border does not quite reach the hinder angle of the anterior wing. Fringes grey, with a blackish line at the base, separated from the broad border by a whitish submarginal line.

"Legs yellow, abdomen white, antennæ black, ringed with white, club black, tipped with yellow." (Kirby, loc. cit.)

Hab. Cámeroons (Preuss).

In the Collections of Dr. Staudinger and H. Grose Smith.

GENUS DURBANIA.

Durbania, Trimen (anteà, p. 46).

V.—DURBANIA GERDA. 9. Figs. 9, 10.

Durbania Gerda, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 265 (September, 1890).

Exp. 1 inch.

- "Female. UPPERSIDE orange-tawny, hind margins slightly scalloped. Anterior wings paler on the disk, with a brown spot at the end of the cell, the costa slightly irrorated with brown, the apical area with a brown shade running downwards parallel to the hind margin, which it does not reach, except at the apex, fringes marked with a blackish interrupted line at their base, swelling into more distinct spots at the extremities of the nervures. Posterior wings nearly uniform in colour, fringes slightly speckled with blackish.
- "Underside. Anterior wings rather paler than above, irrorated with black on the costa above the cell; a large brown spot at end of cell; at one-third of the distance between this and the apex is a series of four oblong spots, placed obliquely, two larger and darker ones on the costa, nearly connected, and two others below; marginal area irrorated with brown, and with a submarginal row of long blackish spots on a paler ground, dusted with grey; fringes preceded by a broken blackish line, most continuous below. Posterior wings brownish-tawny, with rather indistinct markings; two dusky spots above the cell, two below, and one at the extremity; beyond the cell are two festooned lines of connected lunules, the outermost preceding a more continuous series of darker lunules, the space between dusted with grey; a series of blackish spots at the extremitics of the nervures.

"Body tawny above, legs and antennæ black, spotted with white." (Kirby, loc. cit.)

Hab. Barombi (Preuss).

In the Collection of Dr. Staudinger. Allied to D. Aslauqa, Trim.

GENUS TERIOMIMA.

Teriomima, Kirby (anteà, pp. 11, 16, 19).

X.—TERIOMIMA DELICATULA. 6. Figs. 5, 6.

Teriomima Delicatula, Kirb., "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 269 (September, 1890).

Exp. 1 inch.

- "Male. Upperside white, the apical third of the anterior wings ashy. Posterior wings with a few small marginal dots.
- "Underside tinged with yellow on the posterior wings and on the costa and tip of the anterior wings. Anterior wings with a row of ashy spots on the costa, an oblique row on the inner side of the yellowish apical shade, and a spot at the end of the cell, and a small dot within it. Posterior wings with a spot in the cell, spots above and below, and a streak at the end of the cell; and two rows of small obsolete spots nearer the hind margins.
- "Antennæ black, ringed with white, club long and rather slender." (Kirby. loc. cit.)

Hab. Usugara.

In the Collection of Dr. Staudinger.

Closely allied to T. Subpimetata, Kirb., but with the spots much smaller, less numerous. and differently arranged.

XI.—TERIOMIMA DECIPIENS. Figs. 7, 8.

Teriomima Decipiens, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 268 (September, 1890).

Exp. 1 inch.

"Upperside white, costa (narrowly, but most broadly towards the base) and apex, as far as the upper branch of the submedian nervure, ashy.

"Underside more inclining to yellowish, with two submarginal yellow stripes in the male, and one in the female; fringes of anterior wings edged with a black line, as far as the ashy patch of the wing extends on the upper surface.

"Antennæ black, slightly spotted with white; club long and rather slender." (Kirby, *loc. cit.*)

Hab. Barombi, Cameroons (Preuss).

In the Collections of Dr. Staudinger and H. Grose Smith. The sexes hardly differ.

XII.—TERIOMIMA SERENA. Figs. 11, 12.

Teriomima Serena, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 269 (September, 1890).

Exp. 1 inch.

"Upperside yellow, apex of anterior wings black, from two-thirds of the length of the costa, curving round the hind margin to the hinder angle, where the border ends in a point; posterior wings rather narrowly bordered with black from below the tip to the anal angle.

"Underside paler, posterior wings inclining to whitish, anterior wings with a row of black dots on the costa, and one at the end of the cell; all the hind margins with the ends of the nervures marked with black, which forms nearly a continuous line towards the apex of anterior wings; no costal spot on posterior wings.

"Antennæ black, the shaft ringed with white." (Kirby, loc. cit.)

Hab. Sierra Leone (Preuss).

In the Collection of Dr. Staudinger.

Allied to T. Tenera, Kirb., but differs from all the allied species by the continuous narrow border to the posterior wings.

The sexes hardly differ.

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RERIJAN LYCZENIDZE.



Madawike Hed

1 2 EPITOLA DOLETA 7.8 EPITOLA GOODII 3 4 " HENLEYI 9.10 " BAROMB: 5,6 CICONIA 11.12 " CATUNA 9.10 BAROMBIENSIS
11.12 CATUNA

M&N. Hanhart imp.

LYCÆNIDÆ (AFRICAN).

PLATE XVII.

GENUS EPITOLA. IV.

Epitola, Westw. (anteà), pp. 23, 27, 53.

XIV.—EPITOLA DOLETA. &. Figs. 1, 2.

Epitola Doleta, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 273 (September, 1890).

Exp. $1\frac{1}{6}$ inches.

"Male. Upperside blackish-brown, with bright blue markings. Anterior wings with scattered blue markings towards the base of the cell, a short bar just beyond the middle of the costa, running obliquely outwards, and a band running nearly to the hind margin between the median and submedian nervures. Posterior wings with the whole space between the upper part of the cell and the submedian nervure filled up with blue nearly to the hind margin.

"Underside as in E. Catuna (posteà); in one specimen the paler markings are almost entirely obsolete." (Kirby, loc. cit.)

Hab. Sierra Leone (Preuss).

In the Collection of Dr. Staudinger.

Perhaps the male of E. Cephena, Hew., which it somewhat resembles in the undersurface.

XV.—EPITOLA HENLEYI. Figs. 3, 4.

Epitola Henleyi, Kirby, "Annals and Magazine of Natural History," ser. 6. vol. 4, p. 272 (September, 1890).

Exp. $1\frac{1}{2}$ inches.

Male. "Upperside black, and deep violet-blue, the blue portions of the wing broken up into spots by black spaces, especially along the nervures.

"Underside brown, a pale space in the inner margin of anterior wings. vol. 1., April, 1892.

from which two rows of pale submarginal spots run towards the costa, the outermost of three nearly contiguous spots, the innermost of three spots, but the two upper ones contiguous, separated from the third; posterior wings with traces of two paler bands, parallel to the hind margin." (Kirby, loc. cit.)

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

Upperside hardly distinguishable from E. Hyetta, Hew., with which a specimen from Calabar is placed in the Hewitson Collection, but the underside is very different.

XVI.—EPITOLA CICONIA. Figs. 5, 6.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside, sky-blue. Anterior wings with the costa and apex broadly brown, hind margin with the brown border narrowing to the hinder angle, the nervures brown, the median broadly, and two indentations on the edge of the blue part of the wing nearest the costa. Posterior wings blue, with the costa and inner margin broadly and the hind margin narrowly black.

Underside brown, with rather indistinct pale grey markings; a double row of submarginal lunules, and a narrow indistinct and zigzag series of dashes across the middle of all the wings. There is another more regular row of small grey dashes between this and the submarginal series on the posterior wings; on the anterior wings a series of nearly connected lunules runs from two-thirds of the length of the costa, obliquely to the submarginal lunules at the hinder angle, where they are slightly suffused.

Antennæ black, club tawny at the extreme apex and beneath; legs stout, brown, spotted with dull yellow.

Hab. Sierra Leone (?)

In the Collection of Dr. Staudinger.

Resembles E. Carcina, Hew. (which appears to us to be quite distinct from the species figured by Dr. Staudinger under that name), in the position of the oblique row of pale markings on the underside of the anterior wings.

XVII.—EPITOLA GOODII. Figs. 7, 8.

Epitola Goodii, Holland, "Psyche," V. p. 424 (November, 1890).

Exp. $1\frac{1}{4}$ inches.

Upperside purplish-blue. Anterior wings with the costa above the cell,

and almost the apical half black, the dark border diminishing to the hinder angle; the blue ground colour extends slightly outwards opposite the cell. Posterior wings blue, with the costa and inner margin moderately broadly, and the inner margin narrowly black; fringes grey, most distinctly on the posterior wings.

Underside white, with three festooned light brown lines beyond the cell, two of which are submarginal. Anterior wings with a brown streak at the end of the cell; posterior wings with a streak at the end of the cell, another on the costa above, a series of three within, and a single dash still nearer the base.

Body black above, white beneath; antennæ black.

Hab. Kangwé.

In the Collection of Rev. W. J. Holland.

Somewhat resembles E. Zelica, Kirb. (anteà, p. 51), in the pale colouring of the undersurface.

XVIII.—EPITOLA BAROMBIENSIS. Figs. 9, 10.

Epitola Barombiensis, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 274 (September, 1890).

Expands rather over an inch.

Female. "Anterior wings obtusely pointed at the apex, with the hind margin very convex. Posterior wings rounded.

"Upperside purplish-blue. Anterior wings with the costa, apex, hind margin, and nervures black; cell black, with irregular purplish markings towards the base; inner margin but thinly scaled with purple. Posterior wings with the costa and inner margin broadly, and the hind margin more narrowly black.

Underside grey, a dark brown cloud extending from the base of the inner margin obliquely to beyond the cell; thence, after an interruption, it spreads more broadly over the whole apical portion of the hind margin, except where it is slightly interrupted towards the costa before the apex. Posterior wings speckled with smoky-brown, darkest on the hind margin, where it shades into a broad border, ill-defined towards the base, and not extending to the anal angle." (Kirby, loc. cit.)

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

XIX.—EPITOLA CATUNA. Figs. 11, 12.

Epitola Catuna, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 273 (September, 1890).

Exp. 1 to $1\frac{1}{4}$ inches.

- "Male. Upperside deep purplish-blue, with rather broad blackish margins, the nervures narrowly black; fringes grey.
- "Underside greyish-brown. Anterior wings darker at the base to beyond the cell; at the end of the cell stands an obsolete grey spot; the darker portion of the wing is bounded by a row of obsolete grey spots, much expanded on the inner margin; on the hind margin is a row of obsolete grey lunules, dividing into two rows on the upper half of the wing. Posterior wings with three submarginal rows of broad obsolete grey lunules, the innermost most indistinct.
- "Antennæ and legs very slightly ringed with white, and only the extreme tip of the former tawny." (Kirby, loc. cit.)

Hab. Cameroons (Preuss).

In the Collection of Dr. Staudinger.

Resembles E. Hyetta, Hew., on the upper side, and the group of E. Cercene, Hew., below.



AFRICAN LYCZENIDZE, XVIII.



M. Horman Fisher delet lith

1,2 LARINOPODA LARA

3,4 "SYLPHIDA.

9,10 PENTILA SUBUNDULARIS. 11,12 ARGYROCHEILA UNDIFERA.

Harnari kny

5,6 LARINOPODA LYBIA
7,8 , CAMPIMUS

LYCÆNIDÆ (AFRICAN).

PLATE XVIII.

GENUS LARINOPODA.

Larinopoda, Butler (anteà, vol. i. pp. 5, 37, 51, 65).

IX.—LARINOPODA LARA. Figs. 1, 2.

Larinopoda Lara, Staudinger, "Iris," vol. 4, p. 218 (1892). Exp. about $1\frac{1}{2}$ inches.

Upperside white, anterior wings with the costa narrowly bordered with blackish for two-fifths of its length; and after a short interval, an ashy space succeeds, occupying the whole apex, and extending more narrowly along the hind margin as far as the lowest submedian nervule, which it does not cross.

Underside white. Anterior wings with the costa before the middle and the upper half of the hind margin narrowly edged with black; a large blackish blotch about the middle of the costa, and some irregular blackish blotches towards the tip. Posterior wings with a large blackish spot near the apex, and often one or two smaller dots below it; just below the origin of the lowest submedian nervule is a smaller black spot.

Head, thorax, a line on the abdomen above, and the antennæ mostly black, the latter ringed with white, most distinctly below, and with tawny tips; palpi and legs tawny, the palpi tipped with black, and the tarsi ringed with black.

The sexes hardly differ.

Hab. Cameroons (Victoria and Barombi) and Gaboon.

In the Collections of Dr. Staudinger and H. Grose Smith.

Most nearly allied to L. Eurema, Plötz (anteà, vol. i., Afr. Lyc., p. 38, pl. 9, figs. 7, 8; but in that species the undersurface of the anterior wings is much darker at the apex, and there is always a spot in the cell of the posterior wings.

X.—LARINOPODA SYLPHIDA. 8. Figs. 3, 4.

Larinopoda Sylphida, Staudinger, "Iris," vol. 4, p. 217 (1892). Exp. $1\frac{1}{5}$ inches.

Male. Upperside of a semi-transparent iridescent white. Anterior wings with the costa above the cell with an ashy border of nearly uniform width, which curves round the hind margin to the hinder angle; posterior wings with a similar border. The fringes, and the costal nervure on the anterior wings, blackish. Posterior wings with a round black spot at the end of the cell.

Underside similar, but more iridescent. Head and thorax black, antennæ ringed with white, most distinctly beneath, abdomen white, legs ochreousyellow.

Hab. Cameroons (Victoria).

In the Collection of Dr. Staudinger.

Allied to L. Muhata, Dew. (anteà, vol. i., Afr. Lyc., p. 5, pl. 2, f. 1-4), and L. Sylpha and L. Opaca, Kirb. (vol. i. p. 65, pl. 16, f. 1-4), but differs from the two first species in the total absence of a costal blotch, and from the last by its semi-hyaline wings and narrower borders.

XI.—LARINOPODA LYBIA. Figs. 5, 6.

Larinopoda Lybia, Staudinger, "Iris," vol. 4, p. 217 (1892).

Exp. 1 inch.

Upperside white, the hind margins and the costa of the anterior wings very broadly bordered with black, especially in the male.

Underside. Anterior wings with the submarginal part of the border narrower, and with a row of three nearly connected but rather indistinct whitish spots on the costa before the apex. Posterior wings with the dark border continued round the inner margin even to the base of the costa, and separated on the hind margin from the blacker fringes by a band white at the apex, but becoming greyer and narrower from one-fourth of the length of the hind margin to the anal angle. A very large oval black spot covering the upper extremity of the cell.

Body and legs mostly black, abdomen white on the sides and beneath, tarsi ringed with ochreous-yellow.

Hab. Gaboon (Mocquerys).

In the Collection of Dr. Staudinger.

A very distinct species, differing from all others, except L. Campimus, in having the base and inner margin of the posterior wings bordered with black beneath.

XVI.—LARINOPODA CAMPIMUS, Figs. 7, 8.

Larinopoda Campimus, Holland, "Psyche," vol. 5, p. 427 (1890).

Exp. $1\frac{1}{6}$ inches.

Upperside white, hind margins, and costa of anterior wings rather broadly ashy; a short brown tooth descends near the end of the cell.

Underside. Anterior wings as above, but with a white submarginal line near the apex, within which is an oblique white subcostal streak crossed by two brown nervures. The border of the hind margin hardly extends to the hinder angle. The basal two-thirds of the cell is filled up with ashy.

Posterior wings white, with a rather broad ashy submarginal band, separated from the ashy fringes by a large white blotch below the apex, a smaller one on the middle of the inner margin, and a white line further from the fringes at the anal angle. The ashy submarginal band extends round the inner margin to the base, and emits a broad oblique bar from the middle of the inner margin to the middle of the costa, which is again connected by a broad ashy bar above the subcostal nervure with the submarginal band below the apex.

Body ashy, antennæ and legs ringed with white, the former tipped with tawny.

Hab. Ogove, Gaboon.

In the Collections of Rev. W. J. Holland, Dr. Staudinger, and H. Grose Smith. A very distinct species, but with some resemblance to the last.

GENUS PENTILA.

Pentila, Doubleday (anteà, vol. i. pp. 4, 50).

V.—PENTILA SUBUNDULARIS. Figs. 9, 10.

Pentila Subundularis, Staudinger, "Iris," vol. 4, p. 215 (1892).

Exp. $1\frac{1}{6}$ inches.

Male. Upperside white. Anterior wings with the costa and hind margin bordered with brown, rather broadly towards the apex, but ceasing before the hinder angle; its inner edge is rather irregularly indented. An obsolete brown spot at the upper angle of the cell. Posterior wings with a narrow

blackish line at the base of the fringes, which are marked beyond it with short dark dashes on the nervures.

Underside white. Anterior wings flecked with brown, and with an irregular curved brown stripe running from about the middle of the costa, and ceasing opposite the hind margin above the median nervure. The marginal markings cease before reaching the hinder angle; the fringes are light brown, with the extreme tips white, and within them are three black lines, the first continuous, separated by a pale yellow line from the second, which is intersected by the nervures, and separated from the third by a white line; the third black line is interrupted at and between the nervures. Posterior wings with white fringes; and the three black lines separated by white and yellow spaces as above; the outer line is only continuous towards the anal angle; the yellow line is paler, the second black line is continuous, and the innermost line is browner, and slightly waved. Within this are three brown transverse bands, running from opposite the inner margin; the outermost extending to the apex, the second only to the middle of the wing, and the third still shorter.

Head and thorax blackish, abdomen white, legs tawny, tibiæ and tarsi spotted above with black, antennæ ringed with white, and the extreme tip tawny.

Hab. Ogove, Gaboon (Mocquerys).

In the Collection of Dr. Staudinger.

Allied to P. Undularis, Hewitson (anteà, vol. i., Afr. Lyc., p. 9, pl. 2, f. 13).

Dr. Staudinger has received specimens from Victoria (Cameroons), in which the inner brown bands on the undersurface of the posterior wings are obsolete; and in the only female, the black border of the anterior wings hardly extends to the middle of the hind margin. He regards these as merely varieties of one species.

GENUS ARGYROCHEILA.

Argyrocheila, Staudinger, "Iris," vol. 4, p. 215 (1892).

Anterior wings with the upper half projecting in four large silvery-bordered lobes, the apex least, forming hardly more than a rectangle, and the lowest, which is situated about the middle of the hind margin, most; posterior wings more regularly lobate. Anterior wings with the subcostal nervure five-branched; the three first branches emitted at equal distances apart; the first half-way between the base and the end of the cell, and the third emitted at the end of the cell; the fourth and fifth form a rather short fork running to the costa before the apex.

The discoidal nervules and the upper median nervule run to the upper side of the three lower lobes.

Antennæ with a long fusiform club; palpi very slender; eyes naked.

A very remarkable insect, probably allied to *Pentila*, but with a superficial resemblance to some of the South American *Erycinida*.

I.—ARGYROCHEILA UNDIFERA. Figs. 11, 12.

Argyrocheila Undifera, Staudinger, "Iris," vol. 4, p. 215 (1892).

Exp. 1 inch.

Upperside white. Anterior wings with a row of long blackish blotches on the costa; fringes silvery with a black border running from the apex round the lobes, within and below which the wings are irregularly dusted with blackish; an obsolete blackish spot some distance from the hind margin above the upper median nervule. Posterior wings with silvery fringes, marked with black at their base on the nervures.

Underside with similar markings, a slight yellowish shade within the black submarginal line; within this the wings are more speckled with black, and there is an irregular band of connected light brown spots on the upper part of the anterior wings; posterior wings with two macular brown bands running from the anal angle, and coalescing before the apex. Anterior wings with the brown spot above the upper median nervule more distinct; posterior wings with a black spot at the end of the cell, and with one or two of the spots near the anal angle black instead of brown.

Antennæ and legs black, ringed with white.

Hab. Ogove, Gaboon (Mocquerys).

In the Collection of Dr. Staudinger.

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AFRICAN LYCZENIDZE. XIX.



M	H Fisher del et lith .				MåN Hanhart imp
1	TERIOMIMA	ADELGUNDA, &.	9,10	TERIOMIMA	CORDELIA
2,3	15	" ♀.	11,12		ALBERTA . d.
4	27	ADELGITHA, &.	13,14	13	,, O
5,6	13	Ş.	15	ASLAUGA	MARGINALÍS
7,8	μ	MODESTA			

LYCÆNIDÆ (AFRICAN).

PLATE XIX.

GENUS TERIOMIMA.

Terionima, Kirb. (anteà, vol. i. pp. 11, 16, 19, 67).

XIII.—TERIOMIMA ADELGITHA. &. Fig. 4. 9. Figs. 5, 6.

Liptena Adelgitha, Hewitson, "Entomologist's Monthly Magazine," vol. 11, p. 36 (1874).

Exp. 3 inch.

UPPERSIDE dark brown, fringes chequered with white. Anterior wings with an oblique row of three white spots running from two-thirds of the length of the costa towards the middle of the hind margin; in the male, these are more or less obsolete, and are sometimes reduced to one only, as described by Hewitson. Posterior wings with some indistinct whitish markings beyond the middle.

Underside dark brown. Anterior wings with a double row of white submarginal spots, variable in size and shape, within the spotted fringes; within which is a row of six white subcostal spots, the first linear, the fifth much the largest, and a row of five rather large white spots in and beyond the cell; inner margin whitish.

Posterior wings with two rows of submarginal markings, more linear than on the anterior wings, within the spotted fringes; these are white, except the four uppermost of the inner row, which are rusty yellow; the white spots of the inner row nearest the anal angle are marked outside with black. Within these is a third row of much larger white spots, the two uppermost marked with black. There are two more large white spots on the costa, and below the second are some small white markings in and below the cell; the basal spot on the costa is the uppermost of a basal row of three large spots.

In the female, the upper spots of the second submarginal series are rusty vol. II., OCTOBER, 1892.

yellow on the anterior as well as on the posterior wings; and the inner margin of the anterior wings is less white. On the posterior wings the spots are larger and more uniform in size, and more of them are rusty yellow, and accompanied by black spots.

Body black, antennæ and legs ringed with white, the former tipped with

tawny; palpi pubescent.

Hab. Gaboon (Rogers); Cameroons (Preuss).

In the British Museum (Hewitson Collection), and in the Collections of Dr. Staudinger and Mr. H. Grose Smith.

XIV.—TERIOMIMA ADELGUNDA. &. Fig. 1. Q. Figs. 2, 3.

Teriomima Adelgunda, Staudinger, "Iris," vol. iv. p. 219 (1892).

Exp. 1 inch.

Male. Upperside dark brown, the fringes irregularly chequered with white. Anterior wings with a white spot in the cell, two white subcostal spots at two-thirds of the length of the costa, and another white spot nearly opposite the middle of the inner margin; posterior wings with one or two indistinct whitish spots.

Underside. Anterior wings dark brown, with an irregular white band at two-thirds of the length of the wing on the costa, preceded by two small white spots on the costa; and followed by two more; there are two white spots in the cell, six white dashes on the fringes, the fourth very small; none below the submedian nervure; and two rows of white submarginal spots, the outer row commencing with a spot opposite the second dash on the fringes, followed by a very large one; the third is nearly obsolete; the rest are moderate sized, and are continued to the hinder angle; the inner row commences below the costa, and consists of two large spots and three small dots, ceasing beyond the middle of the wing. Within this, nearly opposite the middle of the hind margin, is a large white spot. Inner margin whitish. Hind wings black, irregularly mottled with white at the base and inner margin; within the spotted fringes are two submarginal rows of spots, the first consisting of five spots, the second and fourth largest, the third smallest; the second composed of small dots; within this is a large irregular curved white mark, and there are also three large subcostal spots, and two more spots in the cell.

Female similar, but with the spots all rather larger and better defined. On

the underside of all the wings there are three white spots in the cell instead of two, the two outermost being separated by a black space.

Body black, antennæ and legs ringed with white, the former tipped with tawny; palpi very pubescent.

Hab. Barombi, Cameroons (Preuss).

In the Collection of Dr. Staudinger.

XV.—TERIOMIMA MODESTA. &. Figs. 7, 8.

Teriomima Modesta, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 270 (September, 1890).

Expands rather over an inch.

Male. Upperside uniform smoky brown, fringes rather paler, spotted neither above nor below.

Underside clearer brown with white spots; anterior wings speckled with white at the base; two spots in the cell, above the second is the first of a row of three subcostal dots, followed by a transverse row of four larger spots; two submarginal rows of spots (four in each) on the upper half of the wing, followed by one larger and one small submarginal spot; the first spot of the inner series is preceded by a small subcostal dash; the second and third spots of the outer series have a small dash on the outside; and the fourth spot of the outer series is the smallest, being reduced to a dash. Posterior wings with two large subcostal spots, two spots in the cell and a third (double) closing it; one more rather irregular series of spots below the cell, and a double row of submarginal spots, some of the lower ones of the outer row with smaller adjacent dashes on the outside.

Antennæ black, spotted with white on the underside; the club long, gradually formed, and tipped with tawny.

Hab. Cameroons (Preuss).

In the Collection of Dr. Staudinger.

Allied to T. Adelgunda, Staud., but differs in the unspotted fringes and upper surface.

XV.—TERIOMIMA CORDELIA. &. Figs. 9, 10.

Teriomima Cordelia, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 270 (September, 1890).

Exp. nearly an inch.

Male. "Upperside purplish blue, shading into dusky towards the apex of the anterior wings; fringes blackish. Thorax clothed with rich purple or green hairs.

"Underside brown speckled with tawny on the base and costa of the anterior wings and on the basal half of the posterior wings. Anterior wings (on their upper two-thirds) with two, and posterior wings with three rows of submarginal lines or nearly connected crescents of tawny dusting.

"Head with a tawny line within each eye; antennæ black, ringed with white, club gradually formed, tipped with tawny. Legs tawny, banded with brown." (Kirby, loc. cit.)

Hab. Cameroons (Preuss); Ogowe (Bokh.).

In the Collections of Dr. Staudinger and of Mr. H. Grose Smith.

Allied to T. Dispar, Kirb., and T. Melissa, Druce, but differs in the markings of the underside.

XVI.—TERIOMIMA ALBERTA. &. Figs. 11, 12, 9.13, 14.

Teriomima Alberta, Staudinger, "Iris," vol. iv. p. 220 (1892).

Exp. $\frac{4}{5}$ inch.

Male. Upperside brown. Anterior wings with a more or less distinct curved whitish band running from rather beyond the middle of the costa towards the inner margin. Posterior wings with a tawny band, rather irregular at the edges, and rounded at the extremity, running obliquely from the middle of the inner margin to two-thirds of the width of the wing.

Underside much dusted with grey. Anterior wings with the curved whitish band more distinct, and ending in a white suffusion on the inner margin; within it are three white subcostal dots, and a white transverse stripe, followed by an indistinct whitish mark, in the cell. Posterior wings with four large white subcostal spots, three white spots in the cell, and two below; the tawny band is much paler and more irregular than above, and is varied with whitish on the inside; and there are two rows of submarginal spots, the second and fourth of the outer row being the largest.

Female. Upperside lighter brown, with a yellowish common band, narrowest

1

and incurved on the costa of the anterior wings. On the anterior wings there are three yellow spots on the costa, connected by the median nervure, which is yellow from the base to the end of the cell; and below the cell is a curved yellowish mark forming three-quarters of a circle. On the posterior wings there are two yellowish spots in the cell, and a yellowish streak ending in a dash below. Inner margin dotted with yellowish grey.

Undersurface much dusted with grey. Anterior wings with the yellow band much paler, and shading into grey at each extremity; three large whitish spots in the cell, the two outermost connected below, and two rows of rather irregular submarginal markings, the third of the outer series being much the largest. Posterior wings with five rows of more or less irregular whitish spots and blotches, separated by brown spaces, and one or two more spots towards the base; those representing the yellow band of the upper surface yellower than the others.

Antennæ and legs black, ringed with white, the former with the club tipped with tawny.

Hab. Ogowe, Gaboon (Mocquerys).

In the Collection of Dr. Staudinger.

GENUS ASLAUGA.

Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 261 (September, 1890).

Wings short and broad, very densely scaled, anterior wings strongly curved outwards in the middle of the hind margin, posterior wings with a concavity on the inner margin at the anal angle. Anterior wings with the subcostal nervure five-branched, the first two branches emitted near together before the end of the cell, and parallel; the other three short, and emitted near the apex of the wing, the third and fourth parallel, running into the costa before the tip; the fifth running to the hind margin just below the tip.

ASLAUGA MARGINALIS. Figs. 15, 16.

Aslauga Marginalis, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 261 (September, 1890).

Exp. 1 inch.

vol. п., остовек, 1892.

Upperside tawny, with the hind margins and the costa of the anterior wings rather broadly brown.

Underside uniform yellowish tawny. Body brown, abdomen tawny.

Hab. Sierra Leone.

In the Collections of Mr. Henley Grose Smith and of Dr. Holland.

The sexes do not differ.

Allied to Liphyra Vininga, Hew., which is probably congeneric.

ERRATUM.

By an oversight, the letterpress to AFRICAN LYCÆNIDÆ, Plate XVII. (*Epitola*, Plate IV.), has been paged consecutively after that of Plate XIII. (*Epitola*, Plate III.), instead of after that of Plate XVII. and the same error has been continued in the pagination of the letterpress of Plate XVIII. Consequently the pagination of the letterpress of Plate XVIII. should read 69–72 instead of 57–60; and that of Plate XVIII. should read 73–78 instead of 61–66. The letterpress to Plate XIX. commences with page 79.





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LYCÆNIDÆ (AFRICAN).

PLATE XX.

GENUS EPITOLA.

Epitola, Westw. (anteà, pp. 23, 27, 53, 69).

XX.—EPITOLA PINODOIDES. 6. Figs. 1, 2.

Exp. 1 inch.

Male. Upperside brownish black. Anterior wings with a blue spot below the costa, at about one-third of its length, and a second placed obliquely below and beyond it; the space between the median and submedian nervures is filled up with blue, extending to rather more than half the length of the lowest median nervule; the greater part of the middle of the space between the middle and lower median nervules is also filled up by a large blue patch, narrower above than below. Posterior wings brownish black, with the whole of the space between the subcostal and submedian nervures blue, except on the margins. Fringes of all the wings narrowly buff, most distinctly so on the posterior wings.

Underside light brown, fringes edged by a rather darker line, anterior wings with a silky blackish-brown patch covering about as much of the wing as is occupied by the blue space above; the two subcostal spots not visible.

Body light brown; tarsi ringed with whitish; antennæ blackish, ringed with white, most distinctly below.

Female. Very similar to our figures of Epitola Pinodes, but the black marking on the underside of the posterior wings is continued in a festooned line along the adjoining nervures to the hind margin. A slight trace of this is likewise visible in the male in some lights.

Hab. Sierra Leone (Mocquerys).

In the Collection of Dr. Staudinger.

Allied to E. Pinodes, Druce (anteà, vol. i. p. 53, pl. xiii. ff. 1, 2), but the male is much more blue above, and in the female the hind margin is distinctly curved.

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XXI.—EPITOLA CONJUNCTA. &. Figs. 3, 4. . Fig. 5.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside blackish brown, with buff fringes. Anterior wings with the cell, and the space above and below the submedian nervure filled up with dark blue, as is also the middle of the space between the two lowest median nervules. There are also two small purplish blue spots placed obliquely between the end of the cell and the apex of the wing. Posterior wings purplish blue, with the hind margin narrowly, and the costa and inner margin more broadly, blackish brown.

Underside rufous brown, with a purplish flush most conspicuous on the posterior wings. Anterior wings with a large blackish patch, extending from the base over a great part of the lower half of the wing. On the inner margin is a large greyish patch, but above it, the black space extends almost to the hind margin, and then runs almost straight upwards until above the upper median nervule, when it suddenly turns inwards, and ceases in a black space opposite the light upper part of the cell, which is marked at the outer extremity by two white spots, corresponding to the blue ones of the upper surface.

Female. Upperside brown, anterior wings darker towards the base, and marked at two-thirds of their length by three white spots, running obliquely outwards.

Underside rufous brown, anterior wings with the whole of the centre blackish, but not so dark, or so sharply defined as in the male. At two-thirds of the length, the three spots of the upper side form the three first of a curved band of five, the lowermost of which is above the white space on the inner margin.

Antennæ black, ringed with white, the extreme point of the club rufous.

Hab. Sierra Leone (Mocquerys).

In the Collection of Dr. Staudinger.

A very distinct species, but allied to the group of E. Pinodes, Druce, by the black space on the underside of the anterior wings.

XXII.—EPITOLA REZIA. Q. Fig. 6.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Black, with the base of the cell, an hour-glass mark in the cell, a curved row of rather indistinct spots beyond, and a large space

above the submedian nervure, and the basal half of the space between the two lowest submedian nervules, filled up with violet-blue. Posterior wings with the centre filled up with violet-blue.

Underside purplish grey, anterior wings with the basal two-thirds darker, the darkest portion bordered outside by a curved row of ill-defined greyish spots, terminating in a large greyish space on the inner margin.

Female. Upperside blackish brown. Anterior wings with a curved row of six purplish-blue spots at two-thirds of their length, the lowest and largest above the submedian nervure. In the cell are two blue spots, and the base in and below the cell is dusted with blue. Posterior wings with the greater part of the space from the subcostal to below the submedian nervure filled up with purplish blue nearly to the hind margin, but broken into spots by the nervures, which are rather broadly black.

Underside purplish grey. Anterior wings darker towards the base, with a dusky spot about the end of the cell, bordered on each side by a grey patch. At two-thirds of the length of the wing is a series of grey spots and blotches, ending in large grey spaces on the inner margin.

Hab. Cameroons : (type) Gaboon (3).

In the Collection of Dr. Staudinger.

This species is so very closely allied to an *E. Catuna* (anteà, vol. i. p. 72, pl. xvii. ff. 11, 12) that we were at first inclined to regard it as the female; but we find that it differs from that species, and agrees with a male from the Gaboon (inter alia) in wanting the submarginal markings of the underside. We believe that Dr. Holland considers the specimen figured to be his *Epitola Benitenais* (Psyche, vol. v. p. 425), but the anterior wings of our species do not exhibit the peculiar falcate form which he describes.

It is not easy to discriminate between and correctly assign the sexes of these closely-allied species of *Epitola* without a longer series than is usually at our disposal.

XXIII.—EPITOLA MIRANDA. &. Figs. 9, 10.

Epitola Miranda, Staudinger, "Entomologische Nachrichten," vol. 15, p. 176 (1889).

Exp. about $1\frac{3}{4}$ inches.

Male. Upperside black, with rich violet-blue markings. Anterior wings with traces of blue in the cell, below the subcostal nervure. Below the median nervure is a long blue space (enclosing a long black triangle, with its point directed towards the base), connected with a blue space which fills up the basal portion of the fork between the two lower median nervules; and between this

and the costa runs a curved row of four rather small blue spots. The submedian nervure is likewise slightly marked with blue towards the base, both above and below. Posterior wings, with the lower two-thirds of the cell, and the outer half of the wing, except towards the margins, filled up with purplish blue, divided into spots by the rather broad blackish nervures.

Underside brown, anterior wings with grey spots and markings, in, above and beyond the cell, and on the inner margin, and with two rows of grey submarginal markings, the innermost bifid towards the costa. Posterior wings irregularly mottled with dark brown and purplish grey, the basal half marked with several rather large round blackish spots on a bluish-grey ground.

Anterior wings emarginate below the apex, and posterior wings strongly dentated, as in *Vanessa*.

According to Dr. Staudinger, the female is dull brown, with a few whitish markings.

Hab. Sierra Leone (Preuss).

In the Collections of Dr. Staudinger and H. Grose Smith.

Somewhat allied to E. Falkensteini, Dewitz.

In the same paper in which Dr. Staudinger describes *E. Miranda* he describes another handsome species from the same locality, under the name of *E. Hewitsonii*, which we should likewise have figured here, but that it has lately been redescribed and figured under the name of *E. Crowleyi*, Sharpe ("Annals and Magazine of Natural History," ser. 6, vol. 6, p. 106 (1890); "Transactions of the Entomological Society of London," 1890, p. 555, pl. xvii. ff. 6, 7).

GENUS ASLAUGA.

Aslauga, Kirb. (anteà, vol. ii. p. 83).

II.—ASLAUGA PURPURASCENS. 9. Figs. 7, 8.

Epitola Purpurascens, Holland, "Psyche," vol. 5, p. 424 (1890).

Exp. $1\frac{1}{4}$ inches.

Female. Upperside very pale blue at the base, shading outwardly into bluish grey. Anterior wings with the basal half of the costa grey, but the upper half of the cell brown, which colour then extends to the costa and apex, and more narrowly to the hind margin of all the wings. Anterior wings with the costa slightly concave beyond the middle, the apex slightly pointed, and the

hind margin convex. Posterior wings with the fringes whitish, the hind margin somewhat denticulated, and the anal angle emarginate.

Underside pale grey, speckled with brown, and with a brown line running obliquely from the costa of the anterior wings near the apex to within the emargination of the posterior wings.

Antennæ brown above and grey below; short and thick, with the club very gradually formed.

Hab. Ogove (Gaboon).

In the Collection of Dr. Holland.

GENUS EULIPHYRA.

Euliphyra, Holland, "Psyche," vol. 5, p. 423 (1890).

Anterior wings with the costa nearly straight, the apex rectangular, and the hind margin deeply curved inwards above the middle, and thence oblique to the hinder angle. Posterior wings short, rounded, and rather long, the anal angle pointed, and the inner margin nearly straight, though slightly curved inwards at five-sixths of its length.

Anterior wings with the branches of the subcostal very long, the two first rising near together, and parallel with the costal nervure; the third forking at two-fifths of the distance from the cell to the apex, and the fourth and fifth separating at three-fifths, and reaching the margin above and below the apex.

Palpi comparatively short; antennæ short, but ending in a large fusiform club.

Dr. Holland considers Liphyra Leucyania, Hew., to belong to this genus, which seems to us doubtful. Euliphyra Mirifica has a curious general resemblance to some of the larger Hesperiida.

I.—EULIPHYRA MIRIFICA. &. Figs. 11, 12.

Euliphyra Mirifica, Holland, "Psyche," vol. 5, p. 423 (1890). Exp. 2 inches.

Male. Upperside brown, with a pale line, most conspicuous on the posterior wings, at the base of the fringes. Anterior wings with a large white patch (longer than broad) commencing a little beyond the middle of the inner vol. II., January, 1893.

margin, where it is broadest, and extending upwards to below the basal half of the second submarginal nervure.

Underside purplish brown. Anterior wings with the apical region lighter, except at the fringes, crossed on the inside by a rather irregular dark line extending as far as the upper median nervule, which latter bounds the light apical portion of the wing below. The blotch on the inner margin is of a duller white. Posterior wings with a short dark line on the costa at one-third of its length, a broad black bar, widest above, where it is marked in the middle with paler, at two-thirds, followed below by two short dark lines, partly bordered outside with silvery, and a third dark dash on the inner margin. At the apex a dark line commences narrowly, in a W-shape, and then runs obliquely across the wing as a broad blackish line to the inner margin, near which it forms the inner edge of a large irregular silvery-white blotch, which is completely surrounded with black. On the lower two-thirds of the hind margin the fringes are blackish, and opposite the middle of the inner margin is a long black stripe, ending in a point, and just above its termination commences an irregular dark line running to the inner margin.

Hab. Ogove, Gaboon (Good).

In the Collection of Dr. Holland.

"The specimen was developed from 'a very singular chrysalis, short and thick, and unlike anything of the kind I have observed before, which was found upon the underside of a large leaf. It was black in colour' (A. C. Good)." (Holland, loc. cit.)



AFRICAN LYCZENIDZE.XXI.



M.Horman Fisher delet lith.

1,2 D'URBANIA CARNUTA. 7 LARINOPODA TIRZA. 3,4 TINGRA PICENA. 8,9 TINGRA ROTHA.

10 LARINOPODA LIRCÆA, 8.

5

PHIDIA. 10 –
LAGYRA. 11,12 "
LAGYRA. 13 MAIVA SULPHUREA.

LYCÆNIDÆ (AFRICAN).

PLATE XXI.

On the accompanying plate we have figured the typical specimens of all the unfigured species described by Hewitson under *Pentila* and *Liptena*, except *Liptena Tera* ("Entomologist's Monthly Magazine," vol. 10, p. 125), from the Gaboon, which proves, as first suggested to us by Mr. H. H. Druce, to be identical with *Larinopoda Soyauxii*, Dewitz, of which we have figured a large and unusually well-marked specimen in our vol. 1, Afr. Lyc., pl. 12, figs. 9, 10; but which must now take the name of *L. Tera*. We have filled up the present plate with one or two other species of Mr. Hewitson's, of which it seemed desirable to give more carefully-drawn figures; and have added an interesting new genus and species from the rich collection of Mr. H. Grose Smith.

GENUS DURBANIA.

Durbania, Trimen (anteà, vol. 1, Afr. Lyc., pp. 46, 66).

VI.—DURBANIA CARNUTA. Figs. 1, 2.

Pentila Carnuta, Hewitson, "Entomologist's Monthly Magazine," vol. 10. p. 125 (1873).

Exp. $1_{\overline{10}}$ inches.

Male. Upperside. Anterior wings dark brown, with the space between the median and submedian nervures red from the base nearly as far as the first branch of the median; this red blotch projects in a point in the middle. The inner margin is red below the submedian nervure for three-fifths of its length from the base.

Posterior wings red, with a rather broad blackish-brown border, narrowing to the anal angle; inner margin slightly shading into yellowish.

Underside. Anterior wings varied with brown, and dull ochreous yellow, everywhere speckled with brown; there are traces of three large dark spots in the cell, the last at its extremity; a submarginal blackish band, slightly flecked with white. Posterior wings dull tawny, speckled with brown, and with a slightly interrupted brown border, flecked with white; within this is an angulated row of five large brown spots, two towards the costa, and three towards the inner margin; between the latter and the base are two more large brown spots.

Hab. Gaboon (Rogers).

In the Hewitson Collection (British Museum).

This species has a curious resemblance to some of the South American Lemoniinæ. It is not unlike the butterfly which we have figured under the name of Liptena Parva (anteà, vol. 1, Afr. Lyc., p. 15, pl. 4, figs. 1-4).

GENUS TINGRA, Boisduval (anteà, vol. 1, pp. 6, 31, 61).

XI.—TINGRA PICENA. Figs. 3, 4.

Pentila Picena, Hewitson, "Annals and Magazine of Natural History," ser. 4, vol. 13, p. 282 (1874).

Exp. $1\frac{1}{4}$ inches.

UPPERSIDE white, slightly tinted with yellowish, as are also the fringes.

Anterior wings brown along the costa; apex and hind margin rather broadly brown, nearly as far as the second median nervule, above which the brown border ends rather obtusely. All the wings with a round black spot at the end of the cell.

Underside similar, with the black spots as above. Anterior wings with the costa above the cell, the apex, and hind margin yellow, the border tapering to the anal angle. Extreme costal margin speckled with blackish, and the extremities of the nervures marked with black as far as the second median nervule. Posterior wings yellow, with a ferruginous spot near the apex, and a smaller one between the large spot closing the cell and the hind margin.

Hab. West Africa. (Taken on the march to Coomassie by Lieutenant Bell.)

In the Hewitson Collection (British Museum). Somewhat resembles our *Tingra Fatima* (anteà, vol. 1, Afr. Lyc., p. 62, pl. 15, figs. 8, 9.

XII.—TINGRA PHIDIA. Fig. 5.

Pentila Phidia, Hewitson, "Annals and Magazine of Natural History," ser. 4, vol. 13, p. 383 (1874).

Exp. $1\frac{1}{3}$ inches.

Upperside semi-transparent white. Anterior wings with the costa as far as the middle of the cell, the whole apex beyond the cell, and the space beyond an ill-defined imaginary line extending from the end of the cell to the end of the lowest median nervule, pale orange. Hind margin with a blackish border extending from the apex, where it is scarcely broader, to below the upper median nervule. A long blackish spot at the end of the two lower median nervules. A black spot at the end of the cell, a second on the upper part of the cell, just beyond the middle, and a third just below the origin of the middle median nervule.

Posterior wings with a black spot above the middle of the cell; a second at the extremity of the cell, and a third below the origin of the middle median nervule; there are also five blackish marginal spots at the extremities of the nervures.

Antennæ black, ringed with white (most distinctly below), and with a rather long and somewhat obtuse club; head, thorax, and legs mostly orange.

Hab. West Africa. (Taken on the march to Coomassie by Lieutenant Bell.)

In the British Museum (General, and Hewitson Collections).

Hewitson regarded this insect as probably a variety of *Liptena Abraxas*, Doubl. and Hew. There is, however, a precisely similar specimen, also from Ashanti, in the General Collection of the British Museum.

XIII.—TINGRA LAGYRA, Fig. 6.

Liptena Lagyra, Hewitson, "Exotic Butterflies," III., Pentila and Liptena, pl. 1, f. 42 (1866).

Exp. 11 inches.

Male. Upperside white, costa narrowly and apex and hind margin more broadly brown, about as far as the first median nervule.

Underside white, anterior wings with the costa and fringes narrowly brown, and with a brown blotch on the costa above the extremity of the cell; posterior wings with a blackish spot below the origin of the first median nervule.

Hab. Old Calabar.

In the Hewitson Collection (British Museum).

XIV.—TINGRA ROTHA. Figs. 8, 9.

Pentila Rotha, Hewitson, "Exotic Butterflies," vol. 5, Pentila and Liptena, pl. 2, figs. 8, 9 (1878).

Exp. $1\frac{1}{2}$ inches.

Malc. Upperside orange-tawny, anterior wings with the costa above the cell, apex and hind margin rather broadly brown; above the cell the ground-colour slightly invades the border, the apical portion of which is straight and oblique, but the lower portion slightly indented on the nervules. Base, including half the cell, blackish, speckled with orange-tawny, beyond this is a large spot in the cell, also speckled with tawny, and a round one at the end of the cell; below the cell are two more black spots. Posterior wings with rather broad brown borders, indented internally on the nervures; the base and inner margin much speckled with brown. A blackish spot above the cell, one in the cell before the middle, and another at the extremity, and two more below the cell.

Underside buff, the margins paler buff, irrorated with brown. Anterior wings tinged with tawny, with four large black spots in the cell, the second constricted in the middle; above the two outermost are two more spots nearer the costa, and below the cell two others. Between the cell and the hind margin are two rows of large black spots, curving inwards towards the costa, and uniting in one large spot above the anal angle. Posterior wings with four spots in the cell, three above, three below, and two additional ones nearer the inner margin, and with two submarginal rows of large spots parallel to the hind margin.

Hab. Gaboon (Ansell).

In the Hewitson Collection (British Museum), and in that of H. Grose Smith.

Much resembles our Tingra Mombasæ (anteà, vol. 1, Afr. Lyc., p. 31, pl. 8, figs. 9-12) on the upper side.

GENUS LARINOPODA. Butler (anteà, vol. 1, pp. 5, 37, 51, 65; vol. 2, p. 73 [61, in error]).

XIII.—LARINOPODA TIRZA. Fig. 7.

Pentila Tirza, Hewitson, "Entomologist's Monthly Magazine," vol. 10, p. 125 (1873).

Exp. $1\frac{1}{10}$ inches.

Male. Semi-transparent iridescent white. Anterior wings with the costa and hind margin ashy, as far as the first branch of the median nervure.

Hab. Gaboon (Rogers).

In the Hewitson Collection (British Museum).

Apparently allied to Larinopoda Sylphida, Staudinger (anteà, vol. 2, p. 74 [62, in error]), pl. 18, figs. 3, 4.

XIV.—LARINOPODA LIRCÆA. 8. Fig. 10. 9. Figs. 11, 12.

Liptena Lircæa, Hewitson, "Exotic Butterflies," vol. 3, Pentila and Liptena, pl. 1, figs. 10, 11 (1866).

Exp. about $1\frac{1}{2}$ inches.

Male. Upperside white, rather thinly scaled, anterior wings with the costa, apex, and hind margin rather narrowly bordered with brown, but tapering and ceasing above the lowest median nervule. On the costa, the border becomes almost linear from two-fifths of the distance from the base to one-fifth of the distance from the apex.

Underside white. Anterior wings with the costa bordered with blackish for two-fifths of its length, where a triangular blotch is placed, extending to the level of the cell, but just beyond its termination. The rest of the border is nearly as above, except that it is quite obsolete below where it is narrowest on the costa above.

Posterior wings with two round black spots, the largest near the apex, the smallest below the origin of the lowest submedian nervule.

Head black, body white; antennæ black, annulated with white, most distinctly below; club long, slender, pointed; palpi yellow, tipped with black; legs yellow, femora and tibiæ speckled, and the hind tarsi banded with black. Genital organs very large and prominent, almost resembling those of a dragon-fly.

Female. UPPERSIDE white, more thickly scaled than in the male. Anterior wings with the costa with a uniformly broad black border to just beyond the level of the cell, at which point it is slightly interrupted; beyond this point commences a broad black border, broadest at the apex, where it covers more than the apical third of the costa, but narrowing towards the hinder angle, which it does not quite reach.

Underside with the costal and marginal borders linear; a black triangle just beyond the level of the cell, as in the male; towards the apex there are three connected somewhat irregular blackish markings, the last subapical, and

nearly square; and below it are two smaller black spots, on the upper part of the hind margin. The black submarginal line hardly extends below the middle submedian nervule. Posterior wings with a row of three black spots extending from the costa near the apex, the middle one largest; head and body nearly as in the male.

Hab. Old Calabar (3). Gaboon (9).

In the Hewitson Collection (British Museum), and in that of H. Grose Smith.

These insects are placed together as sexes in the Hewitson Collection, and we have figured them as such; but they come from different localities, and may possibly be distinct species. In this case, the male (our fig. 10) will be the type, as it is the specimen figured by Hewitson; and we think it not improbable that the true female may ultimately prove to be *Larinopoda Lycenoides*, Butler, Trans. Ent. Soc., 1871, p. 172, pl. 7, figs. 2-5, the type of the genus *Larinopoda*, *L. Lara*, Staudinger (anteà, vol. 2, p. 73 [61, in error], pl. 18, figs. 1, 2), is another very closely-allied species of this group.

GENUS MAIVA, Smith and Kirby (gen. nov.)

Wings rather short, anterior wings slightly rounded at the tips, with the subcostal nervure four-branched, the first two branches subparallel, the second emitted just at the end of the cell; the third and fourth separating at half the distance between the cell and the apex, and running into the costa before the apex.

Allied to *Terionima*, from which it is easily distinguished by the subcostal nervure being only four-branched. We regret that we have only a single indifferent specimen at our disposal, and are consequently unable to define the generic characters more fully.

I.—MAIVA SULPHUREA. Fig. 13.

Exp. about 1 inch.

Upperside sulphur-yellow, anterior wings with the apical third brown, from half the length of the costa to the extremity of the lowest submedian nervule, where it ends obtusely; the third and fourth branches of the subcostal nervure slightly bordered with yellowish on the costa. Posterior wings with two brownish spots, surrounded and partly connected by coarse brown dusting at the apex.

Underside yellow, with the extremities of the three last branches of the subcostal nervure marked with black dots.

Hab. Lake Nyassa.

In the Collection of Henley Grose Smith.



AFRICAN LYCZENIDZE XXII. LYCÆNESTHES I



M Horman Fisher del et lith.

1,2 LYCÆNESTHES LYCIINOPTERA. 7,8 LYCÆNESTHES MAHOTA, 8. 3,4 "SCINTILLULA, 8. 9,10 "", 9 11,12 "RUBRICINCT RUBRICINCTA. ,9 11,12 5,6

Hanhart 100

LYCÆNIDÆ (AFRICAN).

PLATE XXII.

LYCÆNESTHES. I.

Lycanesthes, Moore, "Proceedings of the Zoological Society of London," 1865, p. 773.

I.—LYCÆNESTHES LYCHNOPTERA. 6. Figs. 1, 2.

Lycanesthes Lychnoptes, Holland, "Psyche," VI. p. 51 (1891).

Exp. $\frac{3}{4}$ inch.

Male. Upperside. Anterior wings, tawny-copper, the base and costa broadly black; hind margin with a black border, slightly produced on some of the veins, gradually diminishing to the hinder angle. Posterior wings black, with a tawny-copper patch commencing in a point near the base, and spreading over a considerable portion of the middle of the wings nearly as far as the hind margin. Fringes of all the wings inclining to grey.

Underside, black, with two submarginal white lines, the inner line somewhat irregular on the posterior wings. Anterior wings with a white stripe at the base of the costa, a white line running obliquely upwards from the inner margin, near the base, but not extending to the costa; three lines, each broken in the middle, and surmounted by white dots and a line within the submarginal lines which throws off branches inwards at one-third and two-thirds of its length, the innermost joining the summit of the outermost broken line.

Posterior wings with a white basal line, extending to the base of the costa, a line beyond the base, not extending to the costa, a second, double below the middle, and the outer branch strongly **V**-shaped, and then a series of more or less connected lines; two on the costa, two lower down, nearly parallel, but within and not in a line with the others; outside these is an additional short curved line, and below are two more lines corresponding to those on the costa, the innermost broadly **V**-shaped, and the outermost short; beyond this series is a broader white line, nearly parallel to the hind margin. On the vol. II. July, 1893.

margin, above the lower branch of the median nervure, is a black spot with some metallic spangles, and surmounted by an orange \mathbf{U} ; and just beyond the anal angle are a few more metallic spangles.

Hab. Ogové, West Africa (Good).

In the Collection of Dr. W. J. Holland.

Allied to L. Leptines, Hew.

The type is labelled *L. Lychnoptera*; hence, we conclude that *Lychnoptes* is a misprint. We are indebted to the Rev. Dr. Holland, of Pittsburgh, Pennsylvania, for the opportunity of figuring several interesting Lycenide, which he has recently described.

II.—LYCÆNESTHES SCINTILLULA. &. Figs. 3, 4. . Figs. 5, 6.

Lycanesthes Scintillula, Holland, "Psyche," VI. p. 50 (1891); "Entomological News," IV. p. 26 (1893).

Exp. $\frac{5}{6}$ -1 inch.

Male. Upperside bright coppery, anterior wings with the base, costa, apex, and hind margin rather narrowly black. Posterior wings with the costa, basal third, and inner margin as far as the anal angle broadly black; hind margin narrowly black. A round spot close to the border between the two lowest median nervules. Above the submedian nervure, the black border extends semi-circularly into the ground-colour; and a little nearer the base is a black blotch extending to the black colouring of the inner margin.

Underside brown, blackish towards the base, costa, and fringes, and with many irregular pinkish-white stripes, here and there intersected by blackish spots. On the posterior wings the pale markings near the costa and inner margin are of a clearer white on a darker ground, and towards the anal angle are three black spots dusted with blue, one surmounted by an orange arch, between the two lowest median nervules, and the others on each side of the submedian nervure; these are smaller, and are separated and bordered above and below with orange. The pale markings opposite to the middle of the inner margin are **V**-shaped on the basal side, and **U**-shaped beyond.

Body black, antennæ marked with white beneath; club tawny beneath; orbits white; legs mostly white.

Female. Upperside black, with a large shining reddish patch in the middle of each wing.

Underside darker than in the male, and with the pale markings much more sharply defined, and of a uniform pinkish-white colour, except that some

of those on the anterior wings are intersected with tawny. The two contiguous black spots nearest the anal angle of the posterior wings are only bordered with orange on the basal side.

Hab. Gaboon, Ogové.

In the Collections of Dr. W. J. Holland and of the British Museum.

III.—LYCÆNESTHES MAHOTA. & Figs. 7, 8. 9. 9, 10.

Lycanesthes Mahota, H. Grose Smith, "Annals and Magazine of Natural History," ser. 5, vol. 19, p. 65 (1887).

Exp. 11 inches.

Male. Upperside reddish tawny, with the base and all the margins, except the inner margin of the anterior wings, broadly brown. Anterior wings with the upper edge of the reddish part rectangularly indented at half its length; on the posterior wings, the reddish patch is slightly indented above towards the base; towards the inner margin it ends in a sharply-defined arch over a black spot. All the wings with an indistinct grey submarginal line.

Underside banded in almost equal proportions with white and lighter or darker brown; fringes brown, with a black line at their base. Posterior wings (in which the white colour rather predominates) with two small black bluedusted spots at the anal angle, divided by a slight reddish-orange streak; there is a large square black spot near it, surrounded, except below, with reddish orange. Within these eyes runs the outermost and one of the most regular brown stripes.

Female. Upperside brown, with a large reddish-tawny patch, lighter than in the male, on each wing. On the anterior wings it rests on the inner margin, and is nearly square, except that the upper outer side is obliquely truncated; the upper side has a blackish streak in the middle. On the posterior wings the patch is irregular in shape and nearly fills up the middle; beyond it are three connected submarginal lunules surmounting black spots nearly lost in the dark ground-colour of the wing. There is also a submarginal grey line before the black line at the base of the fringes.

Underside pinkish white, with six or seven more or less regular blackish stripes, the third from the base intersected on each wing by a dull reddish patch in the middle. Towards the anal angle are two black eyes, dusted with silvery blue, and surmounted by orange arches.

Antennæ and legs black, ringed with white. Hab. Gaboon (Mocquerys), Delagoa Bay (Mrs. Monteiro).

In the Collections of Dr. Staudinger and Mr. H. Grose Smith. This species is closely allied to L. Scintillula, Holland.

IV.—LYCÆNESTHES RUBRICINCTA. 8. Figs. 11, 12.

Lycanesthes Rubricinetus, Holland, "Psyche," VI. p. 51 (1891).

Exp. 1 inch.

Male. Upperside brown, fringes grey, with a black line at the base. Posterior wings with a rather broad orange-tawny submarginal band, extending from the lower branch of the costal nervure (above which point it is only slightly indicated) to the submedian nervure. It is divided into long spots by the nervures; and is marked on the outside between the nervures with a series of black spots, of which that nearest the anal angle is long and constricted, and the next is much larger than any of the others. Between these and the black line at the base of the fringes runs a narrow white line; and the tails are also tipped with white.

Underside light brown, with two parallel white lines at the end of the cells, and beyond a series of double parallel white lines, interrupted at each nervure, where the next pair are set more inwards or outwards; on the posterior wings the series is slightly angulated. All these lines are slightly bordered on the opposing sides with brown. Fringes grey, with a black line at the base, bordered within by another indistinct white line. Anterior wings with an outer slightly waved but much more regular pair of parallel white lines, the space within which is brown. Posterior wings with the outer row of parallel lines replaced by a series of sagittate white markings; towards the anal angle are two large black submarginal spots, dusted with metallic blue; the outermost is largest, and is surrounded with orange, except on the outer side; the innermost is surmounted by the outer end of an orange stripe which extends to the inner margin.

Body black above, antennæ and legs ringed with white, orbits, head beneath, pectus and abdomen beneath white.

Hab. Kangwé (Good).

In the Collection of Dr. W. J. Holland.

This insect more resembles a species of the familiar European "Brown Argus" group of Lycænidæ, than do most of the other species of Lycænesthes.



LYTELESTHES H



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7.8 LYCÆNESTHES FLAVOMACULATUS. LIBRATIA CONLANDA 9.10. PULCHER LUCRETILIS 11,12 , TURBATUS. 13.14.LYCÆNESTHES BRUNNEUS

LYCÆNIDÆ (AFRICAN).

PLATE XXIII.

GENUS LYCÆNESTHES. II.

V.—LYCÆNESTHES OCULATUS. Q. Figs. 1, 2.

Exp. $\frac{7}{12}$ inch.

Female. Upperside brown. Posterior wings with a row of five submarginal white spaces, more or less filled up with black; the second and third from the anal angle very large, subtriangular, and deep black within; a little on the basal side of these runs an angulated and not quite continuous white line.

Underside light brown, anterior wings with six rather broad white stripes. all except the two basal ones, which are incomplete above, more or less bifurcate and broken towards the costa; the fifth and sixth unite at the lowest median nervule; the submarginal markings consist of four distinct ocelli, centred with blackish, two short parallel white lines on the costal side, and two longer ones, formed of two imperfect lunules, towards the anal angle. Posterior wings with more irregular white markings; two long basal ones, enclosing a blackish space. and followed below by a subrotund white mark filled up with blackish; then a short white streak, followed by a broad irregular band, trifid above, where its innermost fork on the costa is filled up with blackish, and imperfectly divided below by brown lines and dashes; the submarginal markings consist of a broad white dash, two broad white rings filled up with blackish, two large black eyes. corresponding to those above, dotted with shining metallic blue, and surrounded first with a vellowish and then with a white border. Between these and the anal angle is a white space, on which, just before the anal angle, are two smaller black markings, divided by a thick yellowish line.

Antennæ very long, black, ringed with white; club tawny in the middle and beneath, and a tawny line on the middle beneath.

vol. п., остовек, 1893.

Hab. Ogove, Gaboon (Mocquerys).

In the Collection of Dr. Staudinger.

Apparently closely allied to *L. Melambrotus*, Holland, from Kangwé, which may be distinguished by the blue reflection on the wings, the want of the pale line between the eyes and the base on the posterior wings above, and by its larger size (20 millim.).

VI.—LYCÆNESTHES GRAMMICUS. 2. Figs. 3, 4.

Female. Upperside brown, with a row of submarginal white lumiles, bordering spots darker than the ground-colour. These spots are bordered with white on the inside also, towards the anal angle of the posterior wings, but the white markings decrease progressively towards the apex of the anterior wings.

Underside white. Anterior wings: a black bar runs obliquely from the base of the inner margin to the costa, where it is continued more narrowly round the rest of the wing. Beyond this is a tall pyramidal black mark in the inner margin extending two-thirds across the wing, and surmounted by a black spot. Outside the upper part of this is another black mark, of the exact shape of a leg without the foot, and bent at the knee. Opposite the upper part of this ceases another large black mark, rising from the inner margin, and suddenly narrowed at less than half its length. Beyond this again is a black bar, rising from the inner margin, and broken into three spots above, the middle one of which nearly touched the narrow end of the black mark within it; the three spots curve inwards towards the costa, along which they are continued by two more subcostal spots, of which the innermost stands above the leg-shaped There is also a submarginal row of six rather large black spots. Posterior wings with a black basal bar not extending to the costa, two more bars running from the costa, the first short, followed by another short oblique bar, and then by two large black spots towards the inner margin; the second longer, but followed at a greater distance by one spot on the inner margin. Outside this is another long band, somewhat irregular, and broken below. Above and beyond this is a curved row of about eight black spots, and this is followed by a submarginal series of black spots, some of which are slightly speckled with metallic green. A narrow black line at the base of the fringes.

Antennæ spotted, and legs streaked with black and white.

Hab. Mombasa.

In the Collection of Mr. Henley Grose Smith.

VII.—LYCÆNESTHES LUCRETILIS. 3. Figs. 5, 6.

Lycanesthes Lucretilis, Hewitson, "Transactions of the Entomological Society of London," 1874, p. 349; "Illustrations of Diurnal Lepidoptera: Lycanida," p. 228, pl. 91, figs. 29, 30 (1878).

Exp. $\frac{3}{4}$ inch.

Male. Upperside. Velvety black. Anterior wings with some blue speckles at the base, followed by a large 8-shaped mark, interrupted at the top of the lower circle. Beyond this are four rows of more or less irregular and broken blue lines and spots, the two middle ones most slender; also a short blue streak between the second spots from the costa in the two outermost rows. Towards the inner margin the blue markings incline more to violet. Posterior wings with violet-blue markings; a ring at the base, three transverse lines in the cell, the outermost continued by three streaks, set inwards, to the inner margin; two blue lines, united above, where they are surmounted by two or three short lines towards the costa, and divided into short outer streaks, and sagittate inner markings;—two of each kind—by the nervures. There is also a blue submarginal line, with slight traces of an inner one.

Fringes, and extreme tips of the tails, white.

Underside dark brownish-black, with white markings. Anterior wings with a short subcostal line at the base, a long narrow streak from the inner margin, which does not reach the costa, two broad streaks on the inner margin, the outermost continued by a narrow neck to a much broader subcostal stripe; two more diverging stripes from the inner margin, the innermost linear, and extending to the costa, the outermost much broader, and ceasing at the upper median nervule; their upper portions are connected by an intermediate curved line. Above the broad outer stripe is a short broad oblique subapical stripe, within which are two more oblique curved lines, the latter of which joins the streak at its lower end. There are also two submarginal lines, united below, and like most of the other lines, interrupted by the nervures. Posterior wings with three single and three double lines, all broken by the nervures; the second line is expanded in the middle into a large oblong blotch, with an indentation on the lower side; and the second double line coalesces into a large oblong blotch on the costa, closely approached by the outermost streak of the first double line, which separates more widely on the costa. Between the two lower median nervules is a large submarginal and subtriangular black spot dusted with metallic bluish-green, and towards the anal angle is a smaller black spot, similarly dusted.

Body black above, bluish-white below. Antennæ black, ringed with white; legs streaked and banded with black.

Hab. Gaboon (Rogers); Ogove.

In the Hewitson Collection (British Museum) and in that of Dr. Staudinger.

The typical specimens figured and described by Hewitson are so much rubbed that all their characteristic markings are obliterated above, and hence it becomes necessary to redescribe and figure the species.

VIII.—LYCÆNESTHES FLAVOMACULATUS. 6 (?). Figs. 7, 8.

Exp. nearly 1 inch.

Male (?). Upperside dark brown, with double obsolete greyish submarginal lines, followed, on the posterior wings, by an inner one. Anterior wings with three yellowish spots, a large square one near the hinder angle, followed by two smaller ones, one obliquely above it, and the other nearer the base. There are also indistinct traces of other spots, one in the cell, and a row running obliquely from the outermost smaller spot towards the apex. Fringes grey.

Underside brown with white markings. Anterior wings with a short basal streak on the costa, another streak running obliquely upwards and outwards from near the base of the inner margin, three oblong blotches on the inner margin, the first wide, excavated above, and surmounted by two thick stripes, converging and nearly uniting above; the second narrower, and continued upwards towards the costa, the third close to this, but broader, and followed, a little nearer the hind margin, by a stem which forks twice towards the costa. There is also a double submarginal line. Posterior wings with many white lines and stripes, diverging, bifurcating, and sometimes anastomosing, all of which, except that nearest the base, are united on the inner margin, where the second forms a strong **V**. A double submarginal line, separated by oval blackish spaces; between the lower branches of the median nervure is a large black spot, speckled with metallic bluish-green, and surmounted by an orange arch; nearer the anal angle is a smaller black spot, similarly speckled. A black line beyond the submarginal lines, at the base of the white fringes.

Body black above, bluish-white below; antennæ black, ringed with white; abdomen with some transverse blackish lines; legs wanting.

Hab. W. Africa.

In the Collection of Mr. Crowley.

IX.—LYCÆNESTHES PULCHER. &. Figs. 9, 10.

Exp. nearly 1 inch.

Male. Upperside violet-blue, with the base, costa, hind margins, and on the posterior wings, also the inner margin, rather broadly blackish. Anterior wings with a large yellowish patch in the middle, within which the wings shade into purplish. Posterior wings with a rather indistinct white submarginal line, on which stands a large black spot under a tawny arch, between the two lower submedian nervules; between this and the apex are three violet lunules, also within the submarginal line.

Underside dark brown, with broad white stripes and a double submarginal line. Anterior wings with a stripe on the base of the costa, an oblique band beyond, running from the inner margin, but not reaching the costa; and two double bands beyond, partly interrupted by the nervures towards the costa. The outer portion of the first double band is very broad in the middle, where it unites with the inner portion for a short distance; the second double band coalesces, and becomes single below the lowest median nervule. Posterior wings with a white band at the base of the costa, continued round the angle formed by the base, and five transverse white bands, the first isolated, the second bifurcating at one-fourth of its length, the outer branch connected for a short distance with the third band in the middle, and then detaching itself, and becoming V-shaped before the inner margin; the fourth uniting with the fifth at two-thirds of its length, the fifth bending outwards at one-fourth of its length, the concavity being bridged by a narrow white line. All these stripes, from the second to the fifth, are united by a white line on the inner margin. double submarginal line widens out below the middle, and is interrupted by the spots, which are deep black, irrorated with greenish-blue. The largest, corresponding to that above, is surmounted by an orange arch; nearer the anal angle are two smaller ones, divided by an orange line, which curves in both directions, and partly surmounts them, above.

Body black, antennæ and legs ringed with white, lower orbits white.

Hab. North Gaboon (Mocquerys).

In the Collection of Dr. Staudinger.

X.—LYCÆNESTHES TURBATUS. 9. Figs. 11, 12.

Exp. $\frac{5}{6}$ of an inch.

Female. Upperside dark brown, fringes narrowly white. Anterior wings vol. II., OCTOBER, 1893.

with two black spots with grey borders, one oval, in the cell, and another, lighter and subtriangular, on the inner margin. Beyond these are two more obscure blackish spots, bordered outside by a row of grey spots, rather ill-defined, and not extending to the costa; the uppermost of the outer spots is separated from the discoidal spot by a pale grey space. Posterior wings with four blackish spots arranged in a square, one on the costa, two in and opposite the cell, and one below; within the innermost dark spot is a large oval grey one in the cell. A grey line runs from the costa within the outermost spot, and on the inner margin joins a grey submacular stripe which runs from the costa, and is angulated outwards about the middle. Submarginal lines whitish, double, slender, divided by the nervures, and enclosing blackish species.

Underside slate-colour, with white lines. Anterior wings with a white stripe on the costa at the base, two running from the inner margin, converging above, but not meeting or extending to the costa; a third broken into three spots, and an irregular series, consisting of a stripe from the costa to the inner margin, throwing off a branch obliquely downwards and outwards at one-third of its length, which then curves upwards and bifurcates before the costa; below this outer curve is a short white stripe extending to the inner margin. Submarginal lines double. Posterior wings with a complicated interlacing pattern, for which we will refer to the figure, where it is well represented. Outside the last broad dark line stands a black spot, orange within and black without, opposite the two upper tails.

Body brown above, whitish below. Antennæ and legs ringed with black. Hab. Gaboon (Mocquerys).

In the Collection of Dr. Staudinger.

XI.—LYCÆNESTHES BRUNNEUS. . Figs. 13, 14.

Exp. rather over an inch.

Female. Upperside uniform brown; anterior wings with whitish fringes. Posterior wings with grey fringes, and a submarginal row of four black eyes surmounted with whitish crescents, running from the anal angle, the two uppermost largest.

Underside light greyish-brown. Anterior wings with four irregular zigzag whitish lines, the innermost followed by two short black streaks in the

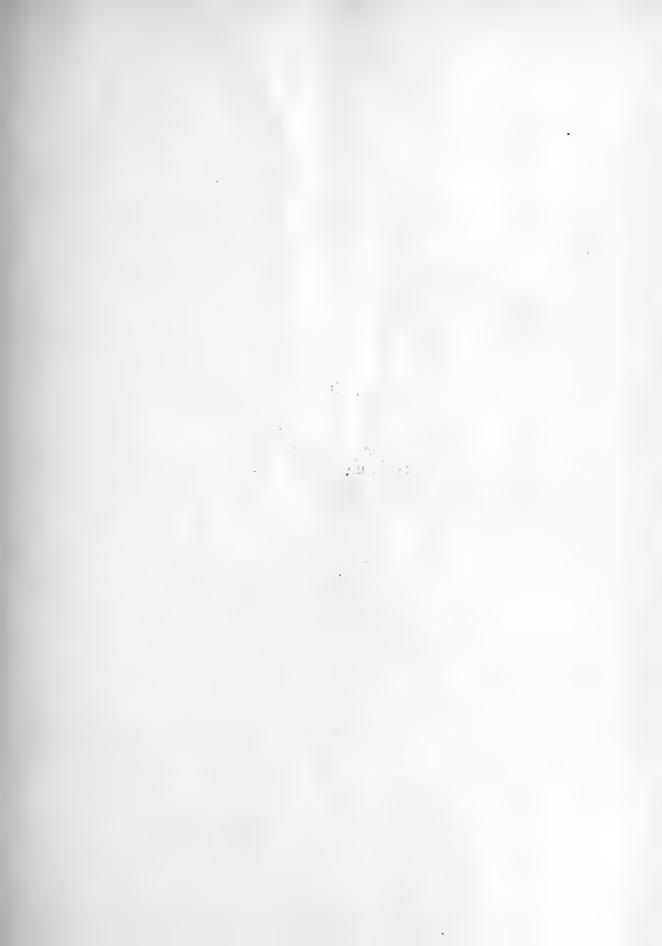
cell, bordered and divided by white lines; between the two following lines runs a row of oval spots, rather darker than the ground-colour; the fourth line is close to two yellowish lines divided by a brown one, the exterior yellowish line marking the fringes. Posterior wings with two black eyes in whitish rings on the basal half of the costa, and four or five irregular zigzag transverse whitish lines, the eyes nearly as above, except that they are irrorated within with metallic blue, and the surmounting crescents are slightly marked with orange; the third eye, however, is nearly obsolete on the under side. Beyond the eyes, the marginal markings are nearly the same as on the anterior wings.

Hab.

In the Collection of Dr. W. J. Holland.

We believe that Dr. Holland intended to call this species *L. paludicola*, but as our plate had already been printed off before we were aware of the fact, and we believe that his description is still unpublished, we have not thought it necessary to alter the name which we had given to the species; but we must apologize to Dr. Holland for the oversight.

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M Horman Fisher del et lith

3.4 .. LITHAS, & ,, 4 5,6

1 1 LYCENESTHES LASTI, 8 7,8 LYCENESTHES LUCKETIA. STAUDINGERI,& 9,10 LEVIS, 8 11,12 ,, 9 13.

LYCÆNIDÆ (AFRICAN).

PLATE XXIV.

LYCÆNESTHES. III.

LYCÆNESTHES LASTI. &. Figs. 1, 2.

Exp. $1\frac{1}{6}$ inch.

Male. Upperside purplish-blue, the fringes and costa of posterior wings alone blackish.

Underside greyish-white, anterior wings with a narrow orange streak at the base of the costa, two parallel white stripes on each side of the discocellular nervules, which are themselves narrowly white; above these are three white subcostal spots. Beyond these are two white lines, only divided by the nervures, but the outermost slightly waved, running from the costa to the upper median nervule; between the median nervule and submedian nervure are a double row of parallel curved lines, each set nearer the base than the last, and faintly bordered with brown on the sides opposite to each other; inner margin whitish. A double row of white submarginal lines, widely divided by the nervures into a series of streaks. Posterior wings with two large round red spots on the costa, very narrowly surrounded with black rings, the innermost with an outer white ring, the outermost bordered with white on both sides; two white streaks at the end of the cell, the outermost indistinct, two rows of nearly parallel white curved streaks, divided by the nervures, below the outer red spot, from the upper subcostal to the upper median nervule, where the outermost ceases; but a third commences beyond it on the lower subcostal nervule, and this and the innermost are continued to the anal angle, where they converge, the last streaks enclosing a long red-lead coloured blotch; between the white lines, other traces of obsolete white lines are also visible, and within each curve of the outermost series is a rather faint orange spot. Two nearly parallel submarginal lines broken into curved streaks by the nervures; three black eyes flecked with blue towards the anal angle, the first surmounted by an orange angle, the second smaller, surmounted with orange, forming part VOL. II., JANUARY, 1894.

of an orange streak continued to the inner margin; the last eye smaller still, distinctly separated from the second, not marked with orange, but standing on a white ground; a white blotch between the two first eyes.

Antennæ ringed with white and tipped with orange; orbits white; pectus thickly clothed with whitish hair.

Hab. Mombasa (Last).

In the Collection of Mr. H. Grose Smith. Allied to L. Lemnos, Hew.

LYCÆNESTHES LITHAS. Figs. 3, 4 &; 5, 6 9.

Lycenesthes Lithas, H. H. Druce, "Annals and Magazine of Natural History," ser. 6, vol. 5, p. 24 (January, 1890).

Exp. $\frac{3}{4} - 1\frac{2}{5}$ inch.

Male. Upperside violet-blue. Anterior wings with the costal area, outer portion of the wing beyond the cell, and above the lowest submedian nervure blackish, broadly continued to the hinder angle. Posterior wings with rather narrow blackish borders, costal area blackish, except in the middle, the two submarginal eyes of the undersurface showing through, indistinctly blackish; inner margin thickly clothed with white hairs.

Underside greyish-white. Anterior wings with two double rows of white curved lines, mostly marked with brown within, those nearest the base commencing with two straight lines across the cell, the outer series more irregular, and not continued to the inner margin, which is whitish; a double row of submarginal crescents, filled up with brown. Posterior wings nearly similar, but with the two double rows of streaks more continuous and nearer together; two large black spots on the costal mostly bordered with white; the three submarginal black blue-dusted spots rather small; the largest surmounted by an orange arch, the second by an orange spot, the smallest close to the anal angle, well separated from the second, and standing on a whitish ground.

Body black above, mostly white below, orbits narrowly white, antennæ black, ringed with white, club irregularly marked with black and orange.

Female (?). Upperside dull violet-blue, costa and hind margins bordered with brown; fringes mostly white. Posterior wings with a large black submarginal spot surmounted with orange, corresponding to that of the underside, and with a white submarginal line between this and the anal angle; fringes mostly white.

Underside. Anterior wings dove-colour, with two oblique white lines in the cell, continued to the submedian nervure, the first interrupted between the cell and the lowest median nervule; the second slightly interrupted on the same nervule. Beyond these are two curved subcostal lines, two below and set a little beyond them, and a straight line a little below and within the outermost, running to the submedian nervure, below which is a white blotch on the inner margin. A double row of white submarginal lunules or streaks, the innermost coalescing with the outermost white line at the lowest median nervule. Posterior wings with two irregular narrow white lines towards the base, the innermost angulated below, the outermost irregularly quadrifid above; outside these stands a broader white stripe, partly divided above; two black spots on the costa, one near the base of the inner margin; three submarginal spots as in the male; a white line followed by a black one at the base of the black fringes.

Hab. Sierra Leone (Preuss); Addah; Cameroons (9 ?).

In the Collections of Dr. Staudinger, Messrs. H. H. Druce and H. Grose Smith.

Allied to L. Thyrsis, Kirb. The female from the Cameroons agrees so closely with the male on the undersurface that there seems to be little doubt of the correctness of the identification.

LYCÆNESTHES LUCRETIA. &. Figs. 7, 8.

Exp. $\frac{5}{6}$ inch.

Male. Upperside. Very nearly the same as in L. Lucretilis, but duller, and with the blue markings much less distinct. Anterior wings with the 8-shaped mark towards the base rather wider, and outside its lower edge is a blue mark angulated inwards; the corresponding mark in L. Lucretilis is straight. On the posterior wings, the inner line of the pair which follow the submarginal markings in L. Lucretilis is entirely absent.

Undersurface. Nearly the same as that of L. Lucretilis, but brown instead of black. The chief difference is on the posterior wings, where an orange band runs above the two small black confluent blue-dusted spots at the anal angle, and the orange arch over the larger eye becomes a broad streak above it, extending from the lowest median nervule to beyond the uppermost, where it gradually fades away. Of these orange markings there is scarcely a trace in L. Lucretilis.

Thorax clothed with bluish hair; abdomen white beneath, and with white

bands on the sides, antennæ black, ringed with white, with a very large club, orange beneath. In L. Lucretilis the club is black, and very slender.

Hab. Victoria, Cameroons (Teusz.)

In the Collection of Dr. Staudinger.

Unfortunately the only specimen is much rubbed on the upper surface; but there is no reason to doubt its distinctness from L. Lucretilis, Hewitson, though it so closely resembles it.

LYCÆNESTHES STAUDINGERI. &. Figs. 9, 10.

Exp. $\frac{5}{6}$ inch.

Malc. Upperside black, with a rich deep purple band running from the base between the median and submedian nervures. It extends to the inner margin for one-third of the length of the wing, but then narrows, ceasing between the lowest median nervule and the submedian nervure at rather more than half the length of the wing.

Underside black, with white markings, and two submarginal lines, so much interrupted that the outermost is almost reduced to a row of spots. Anterior wings with a white line at the base of the costa, an oblique line running up from the inner margin beyond the base, but not reaching the costa, a straight band, bifid below and the outer part disconnected, running up from the inner margin, and surmounted by a white subcostal mark; an irregular macular stripe beyond, the lowest streak broadest, between which and another series of still more interrupted streaks, broadest above, within the submarginal markings are some slender irregular white streaks. Posterior wings with about four series of white lines or streaks between the base and the submarginal markings, besides a slight white mark at the base, and another at the base of the costa; first band from the base moderately broad, nearly continuous, second much widened in the middle, then narrowed, and angulated outwards on the inner margin, so as to enclose an irregular space; third and fourth meeting on the inner margin, in a point curved towards the base; third slender, broadest in the middle, nearly continuous; fourth commencing with a large white blotch on the costa, below which it is very slender and partly double, but becomes composed of larger blotches about the middle of the wing; two submarginal black spots, hardly separated, and dusted with metallic green at the anal angle; the usual third larger one surmounted by a whitish arch.

Body mostly black above and white beneath, antennæ ringed with white, abdomen streaked with white on the sides.

Hab. Ogove (Mocquerys).

In the Collection of Dr. Staudinger.

Much resembles L. Lucretilis, Hewitson, on the underside.

LYCÆNESTHES LEVIS. &. Figs. 11, 12. Q. Fig. 13.

Lycanide," p. 221, pl. 91, figs. 21, 22 (1878).

Exp. $\frac{5}{6}$ -1 inch.

Male. Upperside black. Anterior wings rich purple in the cell, and below the median nervure almost to the hind margin. Posterior wings purple between the subcostal and submedian nervures; a black line across the end of the cell; hind margin black, with a blue submarginal line, and a row of four purple crescents within it.

Underside light brownish-grey, with three submarginal lines, interrupted at the nervures, and the innermost forming a series of crescents on the anterior wings. Anterior wings with no markings at the base; a white bar, bordered outside with blackish, at the end of the cell, and another below it rather nearer the base; next come two white dots on the costa with a black dot between, the outermost white dot obsolete, below which are traces of two obsolete white streaks; beyond these comes a black dot on the costa, followed by a row of three white ones, one below another, followed by a row of three white streaks, the second and third placed nearer the base than those above, the second and third bordered outside and the first inside with blackish; beyond these are three white streaks, two between the median nervules, and the other half-way between these and the costa; these are followed by a white line running from the costa, and another, forming two curves, filled up with blackish, between the median nervules; beyond the lower median nervule this line, and the row of lunules within the submarginal lines, coalesce in a broad white band running to the inner margin. Opposite the second and third lunules of the inner submarginal series are two more white lunules filled up with black, the uppermost nearest the base. Posterior wings with a very large round black spot intersected by a grevish streak, near the base of the costa; it is surrounded, except above, with white. Between these and the submarginal markings are an irregular series of about three sets of short white lines or lunules, the basal series bordered outside, and the others inside, with blackish; the outermost row consists of four, and the second, much nearer the margin than the others, has an extra white line, bordered outside with blackish, opposite to it on the basal side. Two large submarginal black spots, dusted with metallic blue, that at the anal angle surmounted, outside the submedian nervure, by an orange spot, the other by an orange arch. The brown band above them and the black space beyond the larger eye between the submarginal markings, are also speckled with metallic blue.

Body black above, white below, antennæ ringed with black, club orange below; sides of abdomen streaked with white on the incisions.

Female. Upperside uniform brown. Posterior wings with a submarginal bluish-white line, and a row of bluish-white crescents, followed by a corresponding series of bluish-white spots, and enclosing four black spots towards the anal angle, the two nearest to it being confluent.

Underside nearly as in the male, but the blackish markings less pronounced, and on the posterior wings the lines more regular, and the blue dusting on and above the eye less dense and extended.

Hab. Ogove (); Gaboon (); (Mocquerys).

In the Collection of Dr. Staudinger.

Not very closely allied to any other species.



AMRICAN LYCZENIDZE, XZV.



M Homnan Fisher del et lith.

Mintern Bros. imp.

1,2.TERIOMIMA FREYA. 6,7.PENTILA UNDINA

3,4.PSEUDERESIA TRIPUNCTATA. 8.9.LACHNOCNEMA EXIGUUM. 5, DEBORA. 10,11.TINGRA NERO.

DEBORA. IO, 11 TINGRA NERO. 12 TINGRA BERTHA

LYCÆNIDÆ (AFRICAN).

PLATE XXV.

GENUS TERIOMIMA.

Teriomima, Kirby (anteà, vol. i., pp. 11, 16, 19, 67; ii., p. 79).

XVII.—TERIOMIMA FREYA. &. Figs. 1, 2.

Exp. A little over an inch.

Male. Upperside tawny yellow, with broad blackish borders. Anterior wings with the border much broader at the apex; the costa is likewise broadly blackish, sending down two short points into the cell; a third at its extremity, and a much larger one beyond; this last extends to the middle median nervule, and beyond it, the tawny ground-colour extends to the costa, where it ends in a tawny spot forming the last of a series of four running from the base, of which the first is the smallest, and the second has an additional one below it.

Underside. Anterior wings with the tawny markings much redder than above, except towards the inner margin. The broad brown band visible beyond the cell above, here curves round to the base below the cell, the cell itself being crossed by four broad red bands, the two last converging below, and with some irregular tawny markings both above and below them; there is also a row of tawny spots, larger than above, along the costa; the black border is very incomplete, except towards the apex, where it is divided by a double row of irregular tawny blotches; and the hind margin is narrowly black. Hind wings blackish, crossed by about seven irregular reddish macular bands.

Hab. Lindi, German East Africa.

In the Collection of Dr. Staudinger.

Closely allied to T. Hildegarda, Kirby (anteà, vol. i., p. 16, pl. iv., figs. 7, 8), from Angola, and is probably the East African representative of that species. The difference in the shade of ground-colour, and in the details of the markings will be best seen on a comparison of the figures.

vol. II., JULY, 1894.

GENUS PSEUDERESIA.

Pseuderesia, Butler (anteà, vol. i., pp. 4, 35, 44, 57).

XII.—PSEUDERESIA TRIPUNCTATA. 8. Figs. 3, 4.

Exp. $1\frac{1}{5}$ inches.

Male. Upperside uniform smoky brown.

Underside slaty-grey, the fringes marked with grey; anterior wings with three indistinct submarginal rows of grey lunules, not extending below the middle of the wing, and some scattered grey scales towards the base. Hind wings more speckled with grey, and with a double row of grey submarginal markings, the outermost forming lunules, the others nearly straight; on the middle of the costa is a long grey dash, below which, at the end of the cell, is a long oval orange-red spot; below the median nervure are two more spots of the same colour, the outermost large, and surrounding an oval black spot. A little beyond and below the grey costal mark is an indistinct blotch of a paler brown than the ground colour.

Antennæ ringed with white; club large, oval, pointed with reddish; legs ringed with grey.

Hab. Kuilu.

In the Collection of Dr. Staudinger.

Closely allied to *P. O.-Rubrum*, Holland ("Psyche," V., p. 425), from Ogové (Gaboon). But this species is described as having four red spots about the end of the cell, of which three are pupilled with dark brown.

XIV.—PSEUDERESIA DEBORA. 2. Fig. 6.

Pseuderesia Debora, Kirby, "Annals and Magazine of Natural History," ser. 6, vol. 4, p. 264 (Sept., 1890); Rhop. Exot., anteà, i., Afr. Lyc., p. 57, pl. 14, figs. 1, 2 (1891).

Durbania Ashira, Holland, "Psyche," vol. 5, p. 428 (Nov., 1890).

Exp. $1\frac{1}{4}$ inches.

Female. Upperside uniform blackish-brown, the fringes of the posterior wings slightly marked with whitish.

Underside slaty brown, sprinkled with grey scales. Anterior wings with three red spots separated by the nervures, and bordered with black on the sides; towards the apex; some rather obscure black spots on the costa and at the end of the cell, the former separated by clusters of grey scales, and faint

indications of two more black spots in and below the cell. Posterior wings with a faint blackish spot towards the base of the costa, followed by a large black one with a rather obscure red spot slightly bordered with black before and behind it; nearer the apex is a large red spot bordered with black on both sides. In the cell are two large red spots with a small black dot between them, followed by a triangular black spot, and below the first red spot is another, below the cell, with a black spot on each side, that nearest the base smallest. There is also a submarginal row of six black spots, bordered with black; the four lowest lunules, the next very large and square, the uppermost narrow, pointing upwards, and extending to the upper subcostal nervule.

Antennæ and legs ringed with white; club of the antennæ long, slightly truncated at the extremity, and white below.

Hab. Kuilu.

In the Collection of Dr. Staudinger and Dr. Holland (?). The female wants the red blotch on the upper side of the hind wings.

GENUS PENTILA.

Pentila, Doubleday (anteà, vol. i., pp. 4, 50; vol. ii., p. 63).

VI.—PENTILA UNDINA. 6. Figs. 6, 7.

Pentila Undina, Staudinger, MS.

Exp. Nearly one inch.

Male. Upperside yellow. Anterior wings with the costa and apex broadly black, the yellow colour running narrowly upwards nearly to the costa a little beyond the level of the cell; the black at the apex continuing broadly to two-thirds of the length of the hind margin, and then ceasing irregularly; fringes beyond the black portion brownish-yellow. Posterior wings with the fringes towards the hind margin brownish-yellow, and preceded by a black line; within this is a shorter blackish submarginal line, and shorter and fainter traces of a third; the markings of the undersurface are slightly visible through the wing.

Underside. Anterior wings pale yellow, shading into whitish towards the costa, in the upper part of the cell, and towards the hind margin. The fringes are preceded by a black line except towards the hinder angle; and there are two curved blackish submarginal lines, the first extending beyond, and the

second not reaching below the middle of the wing; the space between is whitish, and the outermost is bordered outside by a whitish line, costa speckled with blackish. Posterior wings buff, fringes brown, preceded by a black line, edged within by a yellow one; this is separated by a buff space from a curved rusty brown stripe, parallel to the whole hind margin; and between this and the base are six straight oblique rusty stripes, slightly bordered with yellow, the third not extending above the cell, and the fourth interrupted at that point.

Head black, inner orbits and palpi, except the terminal joint above, yellow; antennæ black, with a rather long pointed club, flagellum banded with white below; legs reddish, femora yellowish: first joint of tarsi ringed with black.

Hab. Kuilu.

In the Collection of Dr. Staudinger. Not closely allied to any other species.

GENUS LACHNOCNEMA.

Lachnocnema, Trimen, "South African Butterflies," vol. ii., p. 233 (1887).

I.—LACHNOCNEMA EXIGUUM. 8. (?). Figs. 8, 9.

Lachnocnema Exiguus, Holland, "Psyche," vol. 5, p. 427 (1890). Pentila Libyssa, var. Libyssima, Staudinger, MS. Exp. 1 inch.

Male (?). Upperside white; base, hind margins, and costa and apex of the anterior wings blackish-brown.

Underside white, anterior wings with the costa and hind margin, nearly to the hinder angle, broadly ashy. Fringes black at the base, and silvery beyond. Two rows of large submarginal spots, five in the outer, and four in the inner row; the outer row, and the two uppermost of the inner row filled up with silver; within these are two similar subcostal spots. Posterior wings with three large pale reddish-brown blotches on the costa, speckled with silvery, faint traces of a smaller one below the first, between the subcostal nervures; a reddish spot in the cell, towards the base, and a reddish horse-shaped mark at its extremity, both slightly speckled with silver, and a pale reddish blotch and spot below the middle of the cells, likewise speckled with silver; the spot very slightly. The fringes are grey, with a silvery line at

the base, edged within by a black line, and there is a row of seven long black submarginal spots speckled with silver, smaller and rounder towards the costa; the uppermost between the subcostal nervures; the lowest linear, on the inner margin, and opposite it commences an inner row of five large pale reddish spots, speckled with silvery and black scales, the two uppermost incomplete; the submarginal black spots, except those at each end, stand on a pale smoky-brown cloud.

Body black above, white beneath, antennæ red, with an incomplete blackish line above; legs clothed with very long white hair, tibiæ with a brown stripe above.

Hab. Kuilu (Staudinger), Ogové, Gaboon (Good).

In the Collections of Drs. Staudinger and Holland.

Not closely allied to any other species.

GENUS TINGRA.

Tingra, Boisduval (anteà, vol. I., pp. 6, 31, 61; vol. II., p. 92).

XV.—TINGRA NERO. . Figs. 10, 11.

Pentila Nero, Staudinger, MS.

Exp. nearly 11 inches.

Female. Upperside fulvous, the hind margins and the costa and apex of the anterior wings broadly brown. Anterior wings with the costal area varied with fulvous and dark brown; the cell with a short black streak at the base, followed by four black spots, the first and third small, the second linear, the fourth very large and round, at the end of the cell; there are also two large round black spots above and two smaller ones below the lowest median nervule; and there is a double curved row of black submarginal spots, nearly lost in the dark ground colour; but the two outer spots adjacent to the lowest median nervule form the last of the inner row. On the posterior wings there are two large black spots on the costa, a small black spot at the base of the cell, and a large one at its extremity, and a smaller one below it; there is also a submarginal row of six black spots, all except the last, which is the smallest, more or less confluent with the black border; inner margin buff.

Underside. Anterior wings as above, but the fulvous part of the wing vol. 11., july, 1894.

paler, and the outer part greenish-grey, speckled with brown; the costal region irregularly spotted with black, the other spots nearly as above, but much better defined on the light ground-colour; a row of long black marginal spots at the extremity of the nervures, and an additional black spot near the base below the cell. Posterior wings light brownish-yellow, shading into greenish-grey on the hind margins; three rows of submarginal black spots, the outermost long, the others round or oval; and a row of large round black spots round the cell, in addition to another at the base of the costa, and a small one in the cell beyond the large spot at the base of the cell.

Body brown above, yellowish-grey below, antennæ black, banded with white below; tarsi ringed with black.

Hab. Kuilu.

In the Collections of Dr. Staudinger.

Belongs to the group of T. Amenaida (Hewitson), as also the following species, but much more heavily spotted.

XVII.—TINGRA BERTHA. &. Fig. 12.

Tingra Bertha, Staudinger, MS.

Exp. nearly $1\frac{1}{2}$ inches.

Male. UPPERSIDE very similar to the last species, but of a darker fulvous, and the dark borders are very much broader, and the black spots larger and more numerous, especially towards the base. On the anterior wings the four large black spots which nearly fill up the cell are confluent with the dark costa above; and on the posterior wings the submarginal row of spots is further from the hind margin, and the second spot from the costa is detached from the border.

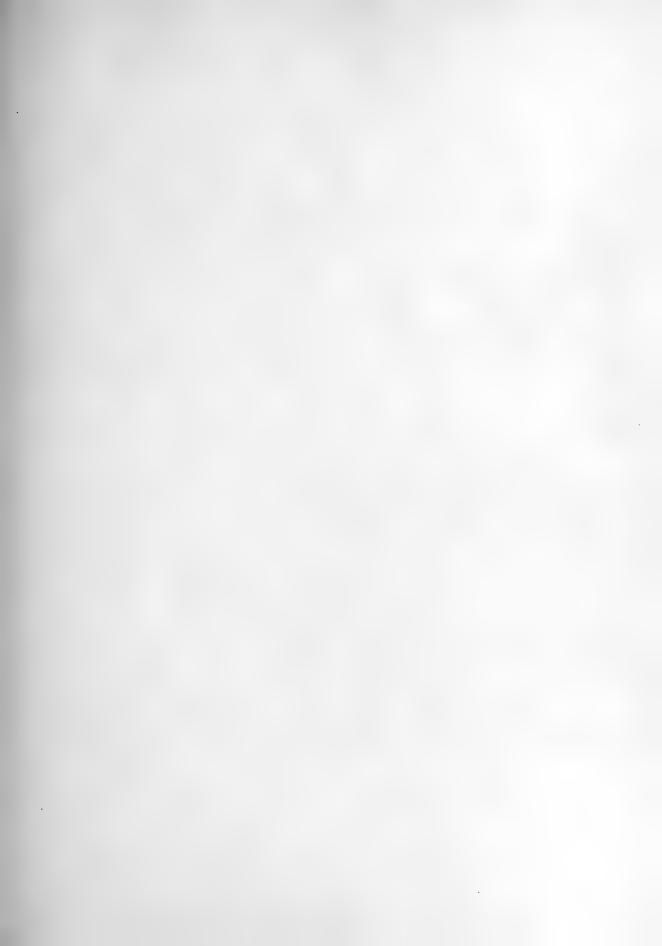
Underside also very similar to T. Nero, but the spots on the basal half of the wings, especially in and below the cell of the anterior wings, are much larger.

The wings are rather shorter and more rounded than in *T. Nero*, the antennæ are black, ringed with white, with the whole club rufous beneath, and the legs are uniform rufo-testaceous, and absolutely devoid of black markings.

Hab. Kuilu.

In the Collection of Dr. Staudinger.

Allied to Pentila Rotha (Hewitson), from the Gaboon.



AFRICAN LYCAENIDAE. XXVI.



Horace Knight deletlith

West,Newman 1mp

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		ALOEIDES		10.11.	AXIOCERSES	BAMBANA. 8.
	4. 6.	11	SIMPLEX.	12. 13.	19	MENDECHE. 8
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LYCÆNIDÆ (AFRICAN).

PLATE XXVI.

GENUS ALOEIDES.

I.—ALOEIDES ZILKA. Figs. 1, 2.

Alocides Zilka.

Exp. 1 inch.

Male. Upperside. Both wings fulvous, anterior wings with the apical half of the costal margin, the apex and outer margin dull brown, but much more narrowly than in A. Thyra, Linn. Posterior wings with dull brown cilia. Underside does not differ from A. Thyra, except that the costal, apical, and outer margins of the anterior and the whole of the posterior wings are less brightly tinged with pink, the metallic spots on the posterior wings are more prominent and the tail at the anal angle is more slender.

Hab. S. Africa.

In the Collection of Mr. Grose-Smith.

I regret that I cannot more closely define the locality. This species is close to A. Thyra, and differs from it chiefly in the absence of the dark brown apical patch on the upperside of the posterior wings of A. Thyra, which is more or less developed in every specimen of that species which I have seen. It is also close to A. Simplex, Trimen, but that species is described as having "a linear fuscous edging along hind margin, only widening in fore wing at apex."

II.—ALOEIDES THYRA. Var.? Figs. 3, 4.

Exp. $1\frac{1}{8}$ inches.

I caused this species to be figured on the Plate under the name of A. Simplex, from specimens in the British Museum under that name, but on comparing them with Mr. Trimen's description of A. Simplex, I cannot make them agree with it. They are, in my opinion, varieties or forms of A. Thyra, Linn., or of A. Pierus, Cram., which as hereafter stated cannot, as I think, be satisfactorily separated.

Hab. Cape of Good Hope.

In the Collection of the British Museum, where there are numerous specimens of both sexes. vol. III., october, 1900. Q Q

III.—ALOEIDES MARS. Figs. 5, 6.

Zeritis Mars, Trimen, "Transactions Entomological Society, London," 3rd Series, Vol. I., p. 285.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. "Bright orange-yellow, not metallic; with dark brown margins. Fore wing: Base fuscous; yellow on costa paler, mixed with grey; a broad dark brown border commences abruptly on costa a little before extremity of discoidal cell (where there is a small, more or less distinct, brown spot), widens considerably at apex, and continues evenly, though less broadly, to anal angle. Hind wing: A small dark dot, often indistinct, closing discoidal cell; another similar spot, often rather larger, near anal angle, just above submedian nervure; a large, dark brown, semicircular, marginal space in apical region, very abruptly narrowing into a streak (internally dentate) along hind margin; a short, acute, anal-angular projection of outline at extremity of submedian nervure. Underside. Costa and apex of forewing and whole of hind wing greyish-, brownish-, ferruginous-, or sanguineous-ochreous. Fore wing: Two black spots in discoidal cell, and one closing it, with brilliant silvery-white centres; an irregular transverse row of similar spots beyond middle; a marginal, blackish, macular band, almost obliterated in its upper half, but broad and wellmarked towards inner margin. Hind wing: Three sinuate rows of glistening, sub-metallic dots across wing—the first, before middle, including a mark closing discoidal cell, the third less shining, merged towards costa in a darker shade; two glistening dots near base, one below costal nervure, the other in cell."

Hab. Knysna; Fort Murray and Fort Hare, British Caffraria.

In the Collection of the British Museum, and others.

Mr. Trimen in the last edition of "South African Butterflies," 1887, and Professor Aurivillius place A. Mars as a synonym of A. Aranda, Wallengr., but I have retained it under the name in which it stands in the collection of the British Museum. I possess a specimen in my collection named "Aranda," by Mr. Guy Marshall, in which the orange-yellow ground-colour on the upperside of the anterior wings broadly extends upwards towards the costa, nearly bisecting the dark brown costal band, and the two small dots on the upperside of the posterior wings are absent. Mr. Trimen alludes to similar specimens from the Basuto Territory and the Transvaal.

IV.—ALOEIDES TAÏKOSAMA. 8. Figs. 7, 8. 9. Fig. 9.

Cygaritis Taïkosama, Wallengr., "Rhop. Kaffr.," p. 43 (1857).

I have here figured two specimens of the largest form of this so-called

species, from Teita, British E. Africa. In size they equal the specimen figured by Cramer, Vol. III., Pl. CCXLIII., Figs. E., F., under the name of *Pierus*, and are nearly twice as large as the ordinary form.

I consider that *Pierus*, Cram., *Almeida*, Feld., *Taïkosama*, Wallengr., *Molomo*, Trim., and *Damarensis*, Trim., are all seasonal, local, or sexual forms, or varieties of the same species, which it is impossible to separate into distinct species, the variations in shape, size, coloration and markings being almost infinite, and merging one into the other in a manner which places it out of the power of anyone to satisfactorily draw the line between one species and another, though extreme forms might appear to warrant separation.

The specimens figured are in Mr. Grose-Smith's Collection.

GENUS AXIOCERSES.

I.—AXIOCERSES BAMBANA. 8. Figs. 10, 11.

Axiocerses Bambana.

Exp. 1 inch.

Male. Upperside. Anterior wings dark brown with a transverse rather glistening rufous band on the disc extending from the upper discoidal nervule to the inner margin about its middle, where it is rather wider; on the outer side of this band are three black bars, two crossing the median nervules confluent, the third rather nearer the base and crossing between the lowest median nervule and the submedian nervure. Posterior wings rufous, dusky at the base, an irregular dark line near the end of the cell and extending a little below it, and a submarginal row of spots on the disc, of which those nearest the apex are the broadest, and those in the middle are nearly obsolete; outer margin narrowly black, a metallic silvery line on either side of the tail. Underside. Anterior wings differ little from A. Harpax, Fabr.; the metallic spots surrounded by black are very conspicuous, and the spots in the submarginal row are all metallic except the lowest; the outer margins of both wings are more convex than in A. Harpax; on the posterior wings the metallic spots and lines are well developed, and there is an outer marginal silvery line which extends round the wings from the end of the upper median nervule to the inner margin at one third from the anal angle.

Hab. Moyabamba, East Africa.

In the Collection of Mr. Grose-Smith.

This species differs chiefly in the much more restricted area of the rufous band on the upperside of the anterior wings, which is much narrower than in A. Harpax, or in A. Amanga, Westw., and the shape of the wings is also different from either of those species.

II.—AXIOCERSES MENDECHE. &. Figs. 12, 13. Q. Fig. 14.

Chrysorychia Mendecre, Grose-Smith, "Annals and Magazine of Natural History," Ser. 6, Vol. III., p. 135 (1889).

Exp. 11 inches.

Male. Upperside. Both wings fuscous. Anterior wings with an orange-red discal band, broad at the apex, which is situate above the upper median nervule, and two spots in the cell of same colour; shoulder broadly orange-red. Posterior wings same colour, except near the base, which is fuscous.

Underside. Both wings reddish-brown. Anterior wings paler beneath the cell, and thence to the inner margin; costa on the shoulder broadly pale yellowish-brown; cell crossed by two spots, two beyond, two near the base on the inner margin, all gold bordered with black; a submarginal row of dark spots, another towards the middle, slightly golden, below which, half-way between it and the two gold spots at end of cell, is another spot, slightly golden, as are also several spots along the costa. Posterior wings with numerous dark spots and markings, not metallic, except the line above the anal excavation.

Female. Upperside. Light orange-brown, with a broad brown band along the outer margin, slightly wider towards the apex; costal margin brown; shoulder pale brown; a dark brown spot in the cell, an elongated transverse bar at the end of the cell; the space below the cell to the inner margin dark brown. Posterior wings light orange-brown with dark veins, dusky at the base, anal lobe also dusky. Underside as in the male, but rather paler.

Hab. Mombasa (Last).

In Mr. Grose-Smith's Collection.

Near to A. Harpax, Fabr., and A. Amanga, Westw.

III.—AXIOCERSES PUNICEA. &. Fig. 15. Q. Figs. 16, 17.

Chrysorychia Punicea, H. Grose-Smith, "Annals and Magazine of Natural History," Ser. 6, Vol. III., p. 134 (1889).

Exp. δ . 1 inch, \mathfrak{P} . $1\frac{1}{4}$ inches.

Male. Upperside. Anterior wings dark brown, with a reddish prune-coloured patch commencing in the middle rather above the upper median nervule, gradually widening to the inner margin; costa on the shoulder brown. Posterior wings with a prune-coloured patch occupying the lower outer two-thirds of the wings; the base, a space half-way down the inner margin, and the costal margin broadly dark brown.

Underside. Pinkish brown; two spots in the cell, one beyond it, two in a row underneath the last-named spot, several spots in a row following the costa, and an elongated spot at the apex golden, edged with black, a submarginal row of spots slightly golden; near the inner margin about the middle is a silvery-white line slightly curving, and between this and the base is another similar line, but shorter and thicker. Posterior wings with numerous small gold markings and a row of same on the outer margin of the lower half of the wings; the excavation above the anal lobe with a submarginal golden line.

Female. Upperside. Both wings orange-brown. Anterior wings with costal and outer margins and base broadly dark brown; shoulder broadly pale orange-brown; cell dark brown, mottled with orange-brown, a dark spot at end. Posterior wings, base, costal and upper portion of the outer margins broadly dusky brown.

Underside pale orange-brown, gradually becoming paler towards the inner margin of anterior wings; the spots as in the male, but larger, as are also the two curved lines on the inner margin of anterior wings.

Hab. Mombasa (Last).

In the Collection of Mr. Grose-Smith.





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LYCÆNIDÆ (AFRICAN).

PLATE XXVII.

GENUS DURBANIA.

VII.—DURBANIA LIMBATA. Figs. 1, 2.

Durbania Limbata, Trimen, "South African Butterflies," Vol. II., p. 217 (1887).

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. "Blackish-brown, with a hind marginal orange-red band, macular in fore wing, very broad and unbroken in hind wing. Fore wing: band lying very close to hind margin, composed of five elongate-ovate spots, between subcostal nervure and first median nervule, gradually diminishing downward, a small or minute orange spot immediately above first spot of band, and the trace of a still smaller spot just before it. Hind wing: band more than twice as broad as in fore wing, except the first spot (between subcostal nervules), which is small, and in two out of three examples partly separate from band, and extending to submedian nervure, its outer edge sinuated by the very dark hind-marginal streak.

"Underside. Hind wing and narrow apical and hind-marginal border of fore wing very pale greyish-brown irregularly speckled with white. Fore wing: orange band situated as on upperside, but not macular, the five spots being enlarged and confluent, its outer edge with a series of blackish marginal indentations, its inner edge bounded by a conspicuous black streak; costal area from base to band rather widely speckled with white; inner discal area smooth fuscous, not speckled, in discoidal cell two blackish white-ringed spots, one near base rounded, the other 8-shaped about middle; a similar larger, curved, sublunulate mark at extremity of cell. Hind wing: a double parallel series of white annulets near base, two annulets being above discoidal cell, two 8-shaped ones in cell, and two below cell; an imperfect elongate suffused white lunule at extremity of cell; a series of nine elongate, orange, outwardly black and brown

dotted, white-ringed spots, submarginal for the greater part of its course, round the wing from costa beyond middle to inner margin close to base. Cilia brownish, with very small white inter-nervular interruptions."

Hab. Estcourt and Bushman's River, E. Natal.

In the Collections of Mr. Grose-Smith and others. Nearest to D. Amakosa, Trim.

VIII.—DURBANIA BARCA. Figs. 3, 4.

Exp. $1\frac{3}{8}$ inches.

UPPERSIDE. Both wings ochreous-brown; anterior wings with the costa and outer margin broadly dark brown with the inner edge of the dark brown area, on the disc, sinuate; posterior wings with the outer margin broadly dark brown, becoming narrower towards the anal angle, which it does not quite reach.

Underside. Anterior wings more yellowish-brown, a broad dull brown costal band from the base to one-third from the apex, apical third of the same colour becoming narrower down the outer margin and ceasing a little before the outer angle; a few indistinct paler brown markings in the brown area before the apex. Posterior wings rather pinkish-brown with a broad, curved, diffused dark band crossing the wings about the middle, a few tawny markings towards the base, and a double row of tawny lunules beyond the dark band.

Hab. Kinsombo, S. Africa.

In Mr. Grose-Smith's Collection.

GENUS ARRUGIA, WALL.

I.—ARRUGIA UMBRA. Figs. 5, 6.

Exp. $1\frac{1}{2}$ inches.

UPPERSIDE. Both wings dull glossy dark brown, anterior wings somewhat darker in the region of the cell and the outer margins emarginate.

Underside. Anterior wings with a dark brown streak in the cell and a little below it to the base, the centre part of the disc paler ashy brown; a dark brown patch beyond the cell interrupted by a broad pale brown bar, beyond which towards the apex is a dark oval spot crossed by a narrow metallic bar,

three subcostal smaller spots, and a submarginal row of metallic spots bordered internally by black. Posterior wings brown, crossed a little before the middle by an irregular darker brown band, three spots of the same colour, two on the costa and one in the cell nearer the base; a curved row of brown spots on the disc and a submarginal row of black spots or bars; the central band is bordered narrowly by metallic lines, and the other spots are marked similarly, but irregularly; the black submarginal bars are centred by metallic lines.

Hab. Cameroons.

In Mr. Grose-Smith's Collection.

GENUS SCOTLANTIADES.

SCOTLANTIADES SUBDITA. Figs. 7, 8.

Exp. $1\frac{1}{8}$ inches.

Male. Upperside. Resembles S. Crawshayi, Butl., but rather larger; on the anterior wings the cilia are less conspicuously barred with white, and on the posterior wings between the lowest median nervule and submedian nervure is a submarginal black spot surrounded by an indistinct pale ring.

Underside. Anterior wings differ from S. Crawshayi in the lowest of the discal band of spots being duplicated and bent outwardly, the subcostal spot inside the band and the spot in the middle of the cell in S. Crawshayi are absent. The posterior wings are crossed by an irregular band of brown spots differently arranged from those in S. Crawshayi; the V-shaped white stripe on the disc of that species is represented by a dull grey stripe, and the cilia are grey, barred indistinctly by brown.

Hab. Nandi (Legros).

In Mr. Grose-Smith's Collection.

GENUS SPINDASIS.

I.—SPINDASIS NILUS. Figs. 9, 10.

Spindasis Nilus, Hewitson, "Ill. Diurn. Lepid.," p. 62 (1865). Exp. $1\frac{4}{10}$ inches.

Female. "Upperside, banded and clouded with brown. Anterior wing with a spot in the cell, a transverse broad band of dark brown in the middle, joined to and forming a triangle with a broad band which has its origin near the apex, and enclosing a triangular space of white marked by an irregular brown spot. Posterior wing crossed obliquely near the middle by two bands of brown, and transversely beyond the middle by a band of the same colour. Both wings with a submarginal band of brown.

"Underside, pale rufous-yellow. Both wings with the outer margin and a submarginal line of spots dark brown. Anterior wing with two spots within the cell, a band of three distinct spots at the end of the cell, three spots forming a triangle and a broad transverse band. Posterior wing with an oblique band of three separate spots near the base; a band of four spots (touching) before the middle, a short undivided band, a small brown spot on the costal margin and a transverse band; two small spots near the anal angle with orange between them.

"All the bands and spots of both wings of the same colour as the rest of the wings, bordered with dark rufous-brown and sparingly decorated with gold."

Hab. White Nile.

In the Hewitson Collection at the British Museum.

"The spots and bands on the underside of this species are placed nearly as in A. Acamas; they are, however, more divided into spots, are of the same colour as the rest of the wing, and much less spotted with gold. Above, it is much obscured with brown."

II.—SPINDASIS VICTORIÆ. 8. Fig. 11. 2. Fig. 12, 13.

Spindasis Victoriae, Butler, "Ent. Monthly Magazine," Vol. XX., p. 251 (1884). Exp. $1\frac{1}{8}$ inches.

Upperside closely resembles Spindasis Natalensis, Doubl. and Hew.

Underside "of a decided sulphur-yellow colour, excepting towards the internal margins; the silver markings in the bands slender and rather dull; borders of the bands on the primaries and towards costa of secondaries thick, and, for the most part, black; oblique post-median band of primaries slightly curved, not single at its inferior extremity, costal spot beyond it further away; abbreviated discal band distinctly sigmoidal instead of straight; no subapical spot; two submarginal lines thick and near together; sub-basal markings very

strongly defined with partly black and partly red borders; oblique elbowed post-median band, excepting at costa, with very slender margins; abbreviated band elbowed and almost divided, a spot at costa being separated from the main body by a black, oblique line; inner submarginal line black, straight, outer line abbreviated, and only remaining at apex."

Hab. Victoria Nyanza.

In the Collection of the British Museum.

Dr. Butler remarks:—"I may note here that the species figured by Hewitson in his "Illustrations" is not the true A. Natalensis, or, indeed, at all nearly allied to it."

III.—SPINDASIS BELLATRIX. Figs. 14, 15.

Spindasis Bellatrix, Butler, "Proceedings Zool. Soc.," p. 369, Note 2 (1886).

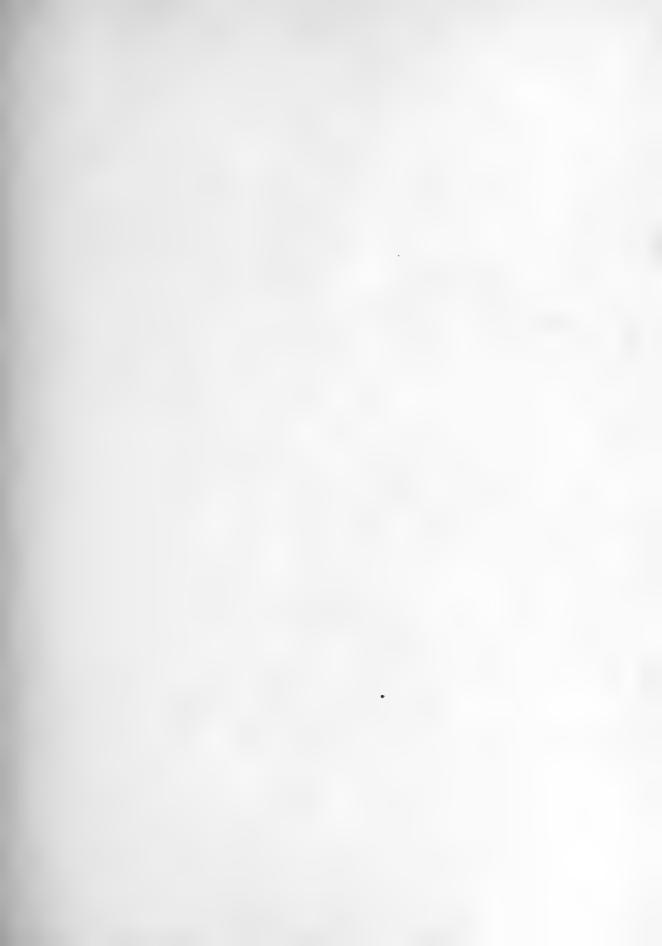
Exp. 1 inch.

"This species is smaller than S. Acamas (Klug), is bright tawny above, with a black marginal stripe and white fringe; the primaries show dusty indications of the ordinary markings upon the costal half; there is also a whitish spot in the cell and a white subapical costal spot; wings below chalkywhite, with pale, sandy-brownish markings edged with black, and enclosing the usual silver streaks and spots; all the bands are a little wider than in S. Acamas, the central band of primaries is abbreviated; the subapical band of secondaries more angular, and the submarginal band interrupted."

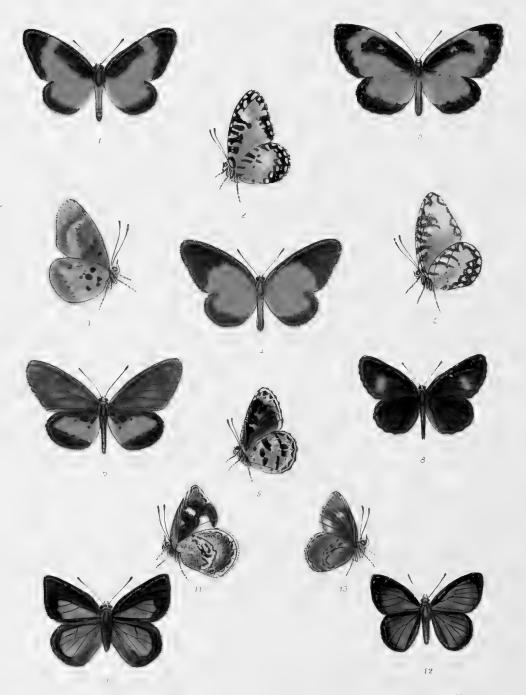
Hab. Suakim (Type, Surgeon Mandest) and Somaliland.

In the Collection of the British Museum.

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FFRICAN LYCZENIDZE XXVIII.



Horace Knight deliet lith

ΙF	TENA	ROTHI.	(
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RUFILLA

TULLIANA

West Newman 1mp

8. 9. PSEUDERESIA PICTA 10 11. IRIDOPSIS ANSORGEI EXQUISITA 12 13.

LYCÆNIDÆ (AFRICAN).

PLATE XXVIII.

GENUS LIPTENA.

IX.—LIPTENA ROTHI. &. Figs. 1, 2. 9. Fig. 3.

Liptena Rothi, H. Grose-Smith, "Novitates Zoologieæ," Vol. V., p. 353 (1898).

Exp. δ . $1\frac{5}{8}$ inches, 2. 2 inches.

Male. Upperside closely resembles L. Acraca, Doubl. and Hew., but on the anterior wings the broad costal black band which in L. Acraca only partially pervades the cell completely fills it, and at the base extends rather broadly to the inner margin. On the posterior wings the outer marginal black band is rather narrower.

Underside. On the anterior wings the black bars crossing the cell extend broadly to the median nervure, and the dusky spot on the upper median nervule of L. Acraea is absent. On the posterior wings the inner of the two rows of white spots in the outer marginal black band extends round the wings.

Female. Upperside closely resembles the male, but is paler; the upper part of the pale rufous band becomes wider and more incurved towards the costa, along which it partially and narrowly extends; towards the end of the cell is an irregular narrow rufous streak placed horizontally.

Hab. Warri, Niger Coast Protectorate, January, 1896 (Dr. Roth).

In the Collection of the Hon. Walter Rothschild.

X.—LIPTENA RUFILLA. Figs. 4, 5.

Exp. $1\frac{3}{4}$ inches.

Male. Upperside differs from L. Semirufa, Grose-Smith and Kirby, in the larger expanse of the rufous area on the anterior wings, which extends over nearly the whole of the cell; on the other hand the rufous area on the posterior wings vol. III., OCTOBER, 1901.

is more restricted, the black outer marginal border being broader and extending further along the costal margin.

On the UNDERSIDE of the anterior wings the outer marginal black band and the black bars crossing the cell and beyond it are narrower; on the posterior wings the outer marginal black band becomes narrower towards the apex, where the inner row of white spots in the band becomes obsolete; there are also several additional black spots or streaks in and around the cell.

Hab. Warri, Niger Coast Protectorate, February, 1896 (Dr. Roth).

In the Collection of the Hon. Walter Rothschild,

XI.—LIPTENA TULLIANA. Figs. 6, 7.

Exp. $1\frac{3}{4}$ inches.

Male. Upperside. Anterior wings brownish black with three indistinct patches of rufous scales between the median nervules. Posterior wings darker brownish-black, with a broad rufous band crossing the wings from the middle of the inner margin to the interspace between the subcostal nervules; the edges of the rufous band are irregular with indications of two black spots on the upper part of the band.

Underside. Anterior wings resemble L. Tullia, Staudinger, but the tawny band appears to be less distinct and more regular outwardly. On the posterior wings the row of spots which follows the contour of the costa in L. Tullia is represented by only three spots, two of which are almost obsolete; there is an additional spot at the end of the cell, the row of spots on the disc is almost obsolete, and the outer margin is broadly ashy-brown, with an indication of sagittate markings in the dark area.

Hab. Four days journey from Beni (Ansorge).

In the Collection of the Hon. Walter Rothschild. The wings are more elongate than in L. Tullia.

XV.—PSEUDERESIA PICTA. Figs. 8, 9.

Pseuderesia Picta, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 356 (1898).

Exp. $1\frac{3}{8}$ inches.

Male. UPPERSIDE resembles Pseuderesia Catharina, Butl., but on the

anterior wings the large suboval dark orange patch on the disc of the latter is represented by a rectangular band placed rather obliquely, which terminates on the lowest median nervule, and there is no orange spot at the end of the cell.

Underside. Anterior wings are much darker, without the costal and submarginal pale areas, and the cellular and discal red bands which cross the upper part of the wings of Ps. Catharina are narrower and more obscure. On the posterior wings the ground colour is more regularly irrorated with red, without silvery grey in the space outside the discal series of spots.

Hab. Warri, May, 1896 (Dr. Roth).

In the Collection of the Hon. Walter Rothschild.

II.—IRIDOPSIS ANSORGEI. Figs. 10, 11.

Iris Ansorgei, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 354 (1898).

Exp. $1\frac{1}{2}$ inches.

Upperside closely resembles I. Perdita, Kirby, but on the posterior wings the purple area is divided at the end of the cell by a black streak, extending partially down the discocellular nervules.

Underside differs from I. Perdita on the anterior wings in having a pale grey spot in the cell and being less rufous at the apex, the metallic edging of which is not green but slightly metallic silvery grey. Posterior wings are very much more grey, the central band being metallic silvery grey edged with dark rufous markings; a dark submarginal rufous area followed by a row of contiguous silvery-grey lunules on the margin. In colouration the underside approaches I. Incredibilis, Stgr.

Hab. Sierra Leone.

In the Collection of the Hon. Walter Rothschild.

III.—IRIDOPSIS EXQUISITA. Figs. 12, 13.

Iris Exquisita, Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 353 (1898).

Exp. 11 inches.

Male. Upperside. Most brilliant metallic purplish blue, with the costa

and apex of anterior wings broadly and outer margin more narrowly black; the costal and outer margins of posterior wings narrowly black.

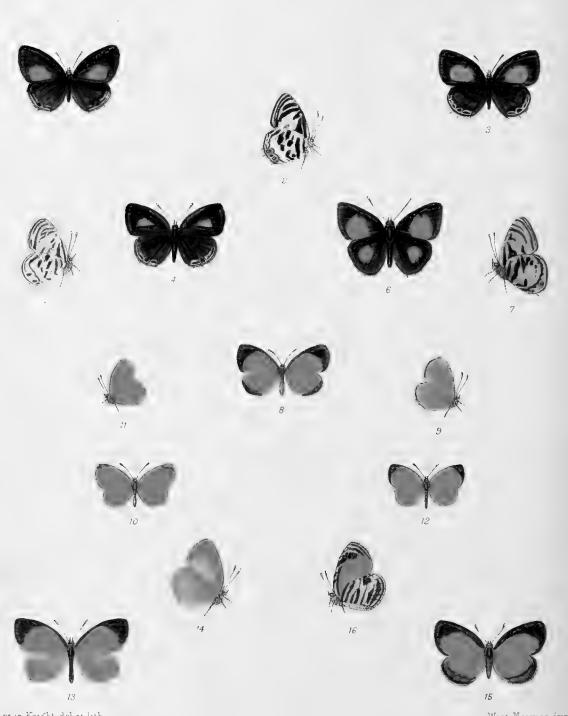
Underside resembles I. Incredibilis, Staud., but the pale markings on the anterior wings are more obscure, the whitish bar at the end of the cell being absent; the apex of the anterior and the ground colour of the posterior wings are much more rufous; the basal three-fourths of the posterior wings is paler than the outer fourth, and the irregular band which crosses their middle is narrower.

Hab. Ogowé River, W. Africa.

In the Collection of the Hon. Walter Rothschild.



AFRICAN LYCZNIDZ ZIXIX.



H.rare Knight delet lith.

West, Newman imp

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LYCÆNIDÆ.—(AFRICAN).

PLATE XXIX.

GENUS LYCENESTHES.

XVII.—LYCÆNESTHES LYCOTAS. &. Figs. 1, 2. 9. Fig. 3.

Lycanesthes Lycotas, H. Grose-Smith, "Novitates Zoologicae," Vol. V., p. 356 (1898).

Exp. $1\frac{1}{8}$ inches.

Male. Upperside. Anterior wings dark brown, with a large pale orange spot extending over the two lowest median nervules and the middle of the disc to the sub-median nervure; this spot is rounder and broader than in I.. Lachares, Hew. Posterior wings with a row of four bluish grey lunules in the middle of the disc, outside which are two submarginal narrow grey lines; an obscure black spot between the two lowest median nervules near the margin, narrowly crowned with orange.

Underside. White, with dark bars and markings as in *L. Lachares*, but much broader and more strongly marked, the dark bar which crosses the cell about the middle becoming very broad below the cell and extending nearly to the base. On the posterior wings towards the anal angle are three submarginal black spots, dusted with metallic scales, crowned, except the middle spot, with orange.

Female. Resembles the male, but the orange spot on the anterior wings is rather paler; on the posterior wings the lunules in the middle of the disc are more obscure and not bluish, and the black spot near the anal angle is crowned with grey instead of orange.

Hab. Bopoto, Upper Congo (Balfern).

In the Collection of the Hon. Walter Rothschild.

XVIII.—LYCÆNESTHES LIPARIS. 8. Figs. 4, 5.

Lycanesthes Liparis, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 357 (1898).

Exp. $1\frac{1}{8}$ inches.

Upperside. Dull brown. Anterior wings slightly convex on the outer margin, with a triangular pale fulvous patch on the disc in the angle formed by the junction of the two lowest median nervules with the median nervure. Posterior wings with a submarginal rather elongate grey lunule before the anal angle, followed by a triangular spot indistinctly crowned with orange; a narrow white line extends along the outer margin.

Underside. Differs little from L. Lachares. Possibly it may be the female of this species.

Expanse of wings, $1\frac{1}{8}$ inches.

Hab. Warri, January, 1896 (Dr. Roth).

In the Collection of the Honourable Walter Rothschild.

XIX.—LYCÆNESTHES LOCUPLES. Figs. 6, 7.

Lycanesthes Locuples. H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 357 (1898).

Exp. $1\frac{1}{8}$ inches.

Male. Upperside. Dark brown. Anterior wings with a transverse broad bright orange patch on the disc, commencing on the upper discoidal nervule, extending into the cell and to the inner margin; the orange patch does not extend so closely to the apex or so near the base below the cell as in L. Mahota, Grose-Smith; there is a black streak in the orange patch at the end of the cell. The disc of the posterior wings is centred by a bright orange patch, trifid outwardly on the median nervules; this patch is more restricted in size than in L. Mahota.

Underside. Both wings pale orange. Anterior wings with a basal clongate dark streak in the cell, a second crossing its middle and expanding very broadly below it towards the base and inner margin, a third streak at the end of the cell, beyond which from the costal margin to the lowest median nervule is a curved band closely followed by a shorter and narrower one; two submarginal bands, of which the inner is much the wider, the outer being

linear; the disc is crossed, between the lowest median nervule and the sub-median nervure, by a short somewhat lunulate band. Posterior wings with a sub-basal dark band, another crossing the cell to the inner margin, and a third at the end of the cell; all three bands commence on the costal nervure. Across the disc are two large spots near the costa underneath each other, followed by a straight row of smaller nearly contiguous spots, and two broad elongate spots towards the inner margin nearly touching each other and forming a wide V-shaped marking; a rather broad submarginal band of contiguous spots, those towards the apex the largest, outside which towards the anal angle are two black lunules dusted with metallic scales and crowned with orange.

Hab. Warri, February, 1896 (Dr. Roth).

In the Collection of the Honourable Walter Rothschild.

On the upperside this species bears a strong resemblance to L. Mahota and L. Dewitzi, Staud., but beneath it is quite distinct.

XVIII.—TERIOMIMA PUSIO. Figs. 8, 9.

Teriomima Pusio, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 355 (1898).

Exp. $\frac{7}{8}$ inch.

UPPERSIDE. Both wings rather brownish-yellow; anterior wings with a broad brownish-black apical and outer-marginal band extending half-way along the costal margin, but gradually becoming narrower. On the posterior wings is a dark outer-marginal band, broadest in the middle, and not quite reaching the apex.

Underside. Paler brownish-yellow; on the anterior wings is a small dusky spot at the end of the cell, in which and on the costal margin are a few dusky markings, and a narrow dusky line near the outer margin. Posterior wings with a minute dusky spot at the end of the cell, and a few small dusky spots near the costal margin towards the base, and a row of narrow dusky lines at the ends of the veins near the outer margin.

Hab. Warri, April, 1896 (Dr. Roth.)

In the Collection of the Hon. Walter Rothschild.

Near to T. Similis, Kirby, but on the upperside of the anterior wings the dark apical area extends further along the costal margin, and on the posterior wings the dark marginal border is narrower and does not extend to the apex.

XIX.—TERIOMIMA XANTHA. Figs. 13, 14.

Exp. Nearly 14 inches.

UPPERSIDE. Both wings pale tawny-yellow; anterior wings with the costa narrowly ashy to about half its length from the base, thence to the apex and over the apical fourth of the wings, and along the outer margin to a little below the middle median nervule, ashy-brown.

Underside. Both wings pale tawny-yellow, paler on the inner marginal area of the anterior wings and with an indication of a submarginal rather darker band on the posterior wings.

Hab. Ntebe, Uganda.

In the Collection of Mr. Grose-Smith.

Nearest to T. Decipiens, Kirby, from which it differs in the colour of the wings and in being smaller.

IX.—DURBANIA MICRA. &. Figs. 10, 11. Q. Fig. 12.

Durbania Micra, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 356 (1898).

Exp. $\frac{7}{8}$ inch.

Male. Upperside. Orange-tawny, less bright than in T. Gerda, Kirby, and more uniform in colour; anterior wings with a rather narrow elongate brown patch extending from the apex about one-fourth along the costa.

Underside. With a series of indistinct brown markings on the costa from the base to near the apex, some of which partially cross the cell, and a series of indistinct submarginal lines; posterior wings with a series of irregularly formed spots and bars, centred with the paler ground-colour, which extends over the basal two-thirds of the wings, and a submarginal row of lumulate brown lines.

Female. Upperside. Brighter than the male, with a dark-brown band at the apex, where it is broadest, and gradually narrowing along the outer margin to the outer angle; several indistinct brown markings on the costa towards the base, one of which extends over the disco-cellular nervules, and that farthest from the base over the discoidal nervules.

Underside. With the brown markings more strongly developed than in the male.

Hab. River Tana, British East Africa (Dr. Ansorge).

In the Collection of the Hon. Walter Rothschild.

It is smaller than the T. Gerda. Possibly the specimen I have described as the female may be a distinct species.

VII.—PENTILA PRÆSTANS. Figs. 15, 16.

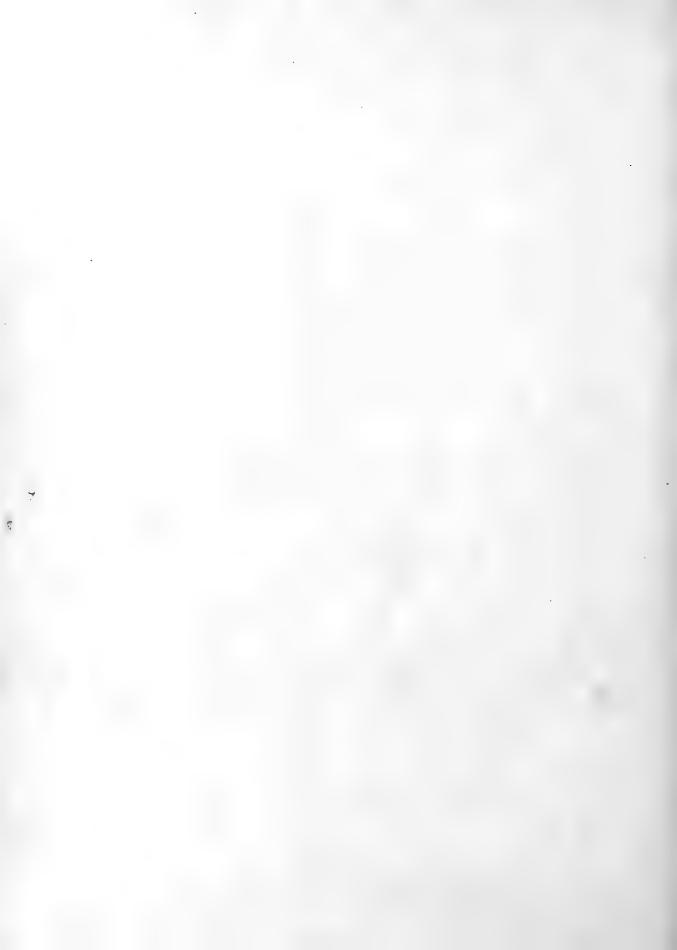
Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Both wings pale rufous-brown anterior wings, with a broad dark ashy-brown band on the costa invading the upper part of the cell; about half-way along the costa the band expands and covers the apical part of the wings, and extends more narrowly along the outer margin to the outer angle, the inner edge of the dark band on the disc is irregular; the posterior wings are bordered by a broad band of the same colour as on the anterior wings, and in the middle of this band is a series of rufous-brown lunules extending from the anal angle nearly to the apex.

Underside. Anterior wings paler rufous-brown with a broad dark-brown costal band in which are several pale markings, and which extends a little beyond the end of the cell, where it is interrupted by the ground-colour; the apical third is dark-brown, interrupted near the apex by two whitish-brown bands of markings; the posterior wings are pale whitish brown crossed from near the inner margin by a series of seven brown bars of varying thickness, the third bar from the base ceases on the subcostal nervure; the fourth bar is interrupted, and becomes linear to the costal margin; the fifth bar expands into a large oval diffused patch on the costal margin, and the sixth and seventh bars become obsolete towards the apex.

Hab. Sierra Leone.

In the Collection of the Hon. Walter Rothschild.





FIRECAR INCENIDAE XXX.



. I ALÆNA PERMATA — 15 TINGKA MYDARIA R. 4 EFITOLA PLIUSA — 9.10 TERIOMIMA FUSCULA F. 6 LABINOPODA LATIMARGINATA ILIE SPINDASIS GUBAURFUS I II FOFM FREMIA SEMIRUFA

AFRICAN LYCÆNIDÆ. XXX.

ALÆNA PICATA. Figs. 1, 2.

Alwna Picata, E. M. Sharpe, "Ann. and Mag. Nat. Hist.," Ser. 6, Vol. XVII., p. 126 (1896).

Exp. $1\frac{1}{2}$ inches.

- "Fore wing. Black, relieved by a transverse band nearly oval in shape from the costal margin, across the discocellular nervules, and extending to the second median nervule; about the middle of the inner margin is a second white mark extending to the first median nervule; these two white marks are distinctly separated by the black of the centre of the wing. The inner marginal white mark is co-terminous with the broad white band of the hind wing.
- "Hind wing. Has a broad marginal border of black, followed by a white band from the costa to the inner margin; the base of the wing black, suffused with orange.
- "Underside. Much variegated. Fore wing black, with white and yellow markings; costa white, with two white spots in the discoidal cell, the end of the cell being marked with the white oval spot mentioned on the upperside. A submarginal row of white spots varying very much in size; these are tinged with yellow, and are divided by the nervules; between these and the large oval discoidal spot is a second row of smaller spots, from the costal margin to the second discoidal nervule.
- "Hind wing white, with a black mark at the base and a small white spot in its centre.
- "Fringe of wing white; a submarginal border of black, preceded by a broad white band, across which the nervules are plainly indicated; this white band is followed by a narrow one of black, in which appear several clearly marked yellowish spots. Head and abdomen orange.

Hab. Between the coast and Teita, E. Africa, December, 1891.

In the Collection of Mr. F. J. Jackson.

By an oversight in the lettering of the Plate, this species is designated as "Alæna Plicata."

XXIV.—EPITOLA ELISSA. Figs. 3, 4.

Epitola Elissa, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 354 (1898).

Exp. $1\frac{1}{4}$ inches.

UPPERSIDE. Both wings dull greyish-black, centred with dull blue, the veins crossing the blue area black. On the anterior wings the blue area extends over the lower part of the cell, a little beyond and above the cell, and the lower three-fourths of the disc to the inner margin; crossing the blue area of the cell are two black spots, and a large black spot on the discocellular nervules. On the posterior wings the blue area does not extend so closely to the costal and outer margins as in *E. Catuna*, Kirby.

Underside. Greyish-brown. Anterior wings with the disc crossed about its middle by two obscure irregular grey lines, and a few obscure streaks beyond; the disc of the posterior wings is similarly crossed by two irregular lines following the contour of the outer margin, with traces of a third before the outer margin.

Hab. Warri, Niger Coast Protectorate, April, 1896 (Dr. Roth).

In the Collection of the Hon. Walter Rothschild.

Nearest to E. Catuna, but the wings are broader; the blue area on the anterior wings of E. Catuna does not extend to the inner margin, and is more purple in colour.

XV.—LARINOPODA LATIMARGINATA. Figs. 5, 6.

Larinopoda Latimarginata, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 354 (1898).

Exp. $1\frac{3}{8}$ inches.

UPPERSIDE. Differs from L. Varipes, Kirby, in the much greater width of the outer-marginal greyish-brown border on both sides of both wings, especially on the posterior wings, where the dark border is three times as wide as in L. Varipes.

On the underside of the posterior wings the black spot towards the end of the cell of L. Varipes is absent, and the subapical spot merges in the dark outer band.

Hab. Warri, May, 1896 (Dr. Roth).

In the Collection of the Hon. Walter Rothschild.

XVIII.—TINGRA CYDARIA. Figs. 7, 8.

Tingra Cydaria, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 355. Exp. $1\frac{3}{8}$ inches.

Allied to T. Paucipunctata, Kirby, which it closely resembles. The following differences occur in T. Cydaria:—

On the upperside of the anterior wings the apical dark band is continued broadly along the outer margin, terminating on the submedian nervure, and the spots at the ends of the cells of both wings are larger.

On the underside these spots are also larger, and in the row of spots round the disc of the posterior wings the spot between the two upper median nervules is the largest; these wings are also less dusky than in *T. Paucipunctata*.

Hab. Warri, May, 1896 (Dr. Roth).

In the Collection of the Hon, Walter Rothschild.

XX.—TERIOMIMA FUSCULA. Figs. 9, 10.

Teriomima Fuscula, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 355. Exp. $\frac{7}{8}$ inch.

Upperside. Both wings brownish-grey. Anterior wings with the disc crossed from near the costa about its middle to the lowest median nervule by a very irregular curved pale tawny band, narrowest on the upper discoidal nervule, widest between the two upper median nervules, thence narrowing rapidly to the lowest median nervule; a small spot in the cell, one rather obscure spot at its end, and one below the first-named spot. Posterior wings with the disc crossed about the middle by a narrow interrupted irregular pale tawny band.

Underside. Paler than above, with pale tawny spots and bands. Anterior wings with three small spots in the cell and the tawny discal band as on the upperside, outside which are two rows of spots between the veins, one extending from the costa to the uppermost median nervule, the other submarginal from near the apex to the outer angle. On the posterior wings are a series of spots crossing the wings in six irregular rows, those in the fourth row across the middle of the disc confluent, and those in the outermost row, towards the apex, extending inwardly and becoming confluent with the upper spots of the fifth row.

Hab. Warri, May, 1896 (Dr. Roth). In the Collection of the Hon. Walter Rothschild. Nearest to *T. Alberta*, Staud.

IV.—SPINDASIS SUBAUREUS. Figs. 11, 12.

Aphnaus Subaureus, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 358.

Exp. $1\frac{3}{8}$ inches.

Female. Upperside. Resembles A. Acamas, Klug, but is much paler tawny, with broader dusky bands. On the anterior wings the band crossing the end of the cell obliquely from the costal margin becomes confluent with the submarginal band between the two lowest median nervules, and extends in a broad dusky area to the outer angle and outer third of the inner margin. On the posterior wings the dusky bands are very broad, the intervening spaces being paler dusky; a rather broad pale tawny submarginal band and dusky irregular outer margin.

Underside. Very pale fulvous, with pale golden scales and lines in the bands and spots, all of which are centred with the ground-colour. On the anterior wings the oblique band which crosses the end of the cell extends uninterruptedly nearly to the inner margin, and on the posterior wings the band from the costal margin near the apex to the middle of the disc is situate farther apart from the central transverse band of spots, and the two upper subbasal spots are quite separate.

Hab. Lokoja, River Niger, May, 1896 (Dr. Cook).

In the Collection of the Hon, Walter Rothschild.

XVI.—PSEUDERESIA SEMIRUFA. Figs 13, 14.

Exp. $1\frac{3}{8}$ inches.

UPPERSIDE. Anterior wings dark brown, posterior wings also dark brown, with a large orange patch which extends over the upper part of the wings from the base and costal margin as far as the upper half of the cell, but does not reach the outer margin except at the apex.

Underside. Anterior wings sordid brown with a sordid orange area from the lower third of the wings to the inner margin and base. Posterior wings dull pale brown with an orange tinge, seven dull brown spots towards the base, three below the costal nervure, one in the cell, one at the end and two others below it; two dark spots between the submedian nervules and an indication of a dark outer marginal border.

Hab. Sierra Leone.

In the Collection of the Hon. Walter Rothschild.



ORIENTAL LYCAENIDAE, II. HYPOCHRYSOPS.



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LYCÆNIDÆ (ORIENTAL).

PLATE I.

HYPOCHRYSOPS. I.

I.—HYPOCHRYSOPS PLOTINUS. &. Figs. 1, 2. Q. Fig. 3.

Hypochrysops Plotinus, H. Grose Smith, in "Novitates Zoologica," vol. 1, p. 546 (April, 1894).

"Male. Upperside. Both wings brilliant purple-blue. Anterior wings with the costal area from the base as far as the costal nervure, apex, and outer margin broadly brownish-black, the black outer marginal area gradually tapering to the outer angle. Posterior wings with the space between the subcostal nervure and upper subcostal nervule to the costal margin dusky brown, with a narrow blue streak above the former; outer margin narrowly brownish-black.

"Underside. Anterior wings pale ochraceous, rather darker at the lower part of the cell and towards the apex and outer margin, crossed towards the apex from the costa to near the outer angle by an oblique broad rufous-brown band edged on each side with a row of gold spots; there is a submarginal row of gold spots between the veins parallel with the outer margin, the spot near the apex the largest, gradually decreasing in size; the four uppermost spots with black dots on the inner side, a rather large gold spot in the cell near its upper end, and three gold spots between the end of the cell and the rufous band. Posterior wings, basal fourth pale ochraceous, the rest of the wings rather darker, a streak on the costa at the base, a broad longitudinal irregular bar from the base to a little before the apex almost intersected in the middle, and joined at its middle by another bar which crosses the cell from the inner margin at about one-fourth the distance from the base; across the disc between the subcostal nervules is a quadrangular spot which is confluent with a triangular spot between the second subcostal and the discoidal nervule, the latter being contiguous with the outer end of the bar which crosses the cell; rather nearer the margin are three confluent spots, the middle spot the longest; beyond which to the inner margin is another spot; all the spots are bright rufous and edged on each side with gold; a narrow submarginal gold line traverses an outer marginal broad band which is pale rufous.

"Female. Upperside. Both wings pale ochraceous; anterior wings, with the costa at one-fourth from the base, and thence extending very broadly over the apical and outer marginal area, dark brown; the inner edge of the dark area irregular and curving to the inner margin at three-fourths from the base; posterior wings with the space between the costal margin and the subcostal nervure and subcostal nervules dark brown, the median nervules and submedian nervure are tipped with brown a little before the outer margin, the brown colour extending inwards a little along the veins and on each side of them forming an irregular submarginal dark line; these veins are also tipped with dark brown on the margin.

"Underside resembles the male, but the bars and spots are darker rufous." Hab. Humboldt Bay, New Guinea (Doherty, Sept.-Oct., 1892).

In the Collection of the Hon. Walter Rothschild.

"A very beautiful and distinct insect. The male somewhat resembles H. Eucletus, Feld., on the upperside, but the blue area is very much more extended. The female on the upperside resembles H. A_{f} elles in colour, but is paler. Two males and four females are in the Collection." (H. G. S.)

II.—HYPOCHRYSOPS CALLIPHON. 6. Figs. 4, 5. 9. Fig. 6.

Hypochrysops Calliphon, H. Grose Smith, in "Novitates Zoologicæ," vol. 1, p. 548 (April, 1894).

Exp. δ $1\frac{1}{8}$ inches; \mathfrak{g} $1\frac{1}{4}$ inches.

"Male. Upperside. Both wings pale blue. Anterior wings with the costal margin, apex, and outer margin broadly dark brown; the blue area extends over the cell and the inner two-thirds of the wings, at the upper end of the cell it extends obliquely across the wings to the lowest median nervule. Posterior wings with a broad dark greyish-brown border along the costal and outer margins, inner margin narrowly brown, the area between which and the submedian nervure is greyish-blue.

"Underside. Both wings dusky-brown; anterior wings crossed on the disc with an ill-defined darker brown band widest towards the costal margin. gradually narrowing towards the inner margin, and two dusky spots below the cell; the cell and the space above it nearly to the apex is bright ochraceous, a streak in the cell with four spurs reaching to the median nervure, another along the subcostal nervure, a shorter one at the base below the costal margin, a bar at the end of the cell bordered outwardly with black, and six confluent spots between the subcostal nervules arranged in pairs and bordered with black, all metallic greenish-blue; there is a pale space before the apex, and a submarginal row of metallic greenish-blue spots situate on the inner edge of an ochraceous marginal band. Posterior wings with the costa at its base, and three sinuate bars dark red, the first bar is near the base, the second, which crosses the upper part of the cell, commences on the costal nervure terminating on the inner margin, the third commences on the subcostal nervure just beyond its junction with the first subcostal nervure, crosses the end of the cell and terminates on the submedian nervure, with a short spur which extends inwardly along the median nervure, all the bars narrowly bordered with metallic greenish-blue; there is a dark patch between the costal nervure and subcostal nervules beyond the upper part of the middle bar, an obscure dark red oblong spot beyond the end of the cell bordered on each side with black, and a dark curved band over the disc, widest towards the inner margin, the outer margin is rather broadly ochraceous, on the inner edge of which is a rather broad band of metallic bluish-green, narrowly bordered on each side with black.

"Female. Upperside rather paler light blue than the male, the blue area extending over the whole of the wings except the costal and outer margins, which are rather broadly greyish-brown.

"The underside resembles the male but is rather paler, and the metallic spots are broader and more developed."

Hab. Humboldt Bay, New Guinea, Sept.-Oct., 1892 (Doherty).

In the Collection of the Hon. Walter Rothschild.

Not closely allied to any described species. One male and three females are in the Collection.

III.—HYPOCHRYSOPS THESAURUS. &. Figs. 7, 8. Q. Fig. 9.

Hypochrysops Thesaurus, H. Grose Smith, in "Novitates Zoologica," I., p. 547 (April, 1894).

Exp. $1\frac{1}{8}$ inches.

- "Male. Upperside. Anterior wings dark blackish-brown suffused with purple, except towards the apex and partially along the outer margin. Posterior wings brilliant metallic blue, costal margin broadly brown.
- "Underside. Anterior wings dull ashy-brown; the cell, a short bar at the end of the cell bordered outwardly by a silvery bar, and the costal margin nearly to the apex dark ochraceous, a metallic silvery-blue streak in the middle of the cell from the base to its end, where it bends downwards to the median nervure, another silvery streak along the subcostal nervure extending a little beyond the end of the cell, above and beyond which are four metallic spots tipped with black between the subcostal nervules; nearer the apex, crossing the disc from the costal margin to the lowest median nervule, is a continuous row of ochraceous lunules situate in a dusky space, the four uppermost with metallic spots on the inner side, and there is a submarginal row of metallic spots situate in a pale ochraceous marginal band and tipped internally with black. Posterior wings with a pale patch near the apex, the costa at the base, and five bars crossing the wings rufous, edged on each side with metallic silvery blue, in which are a few black markings, the bars being nearly parallel to each other, except the two outer bars which touch each other on the lowest subcostal nervule; of these two bars the inner one extends from the inner margin and ceases on the lowest subcostal, the outer bar commences near the apex and ceases on the lowest median nervule. The outer margin is broadly ochraceous and centred with metallic silvery blue, a few narrow black streaks on the inner edge of the marginal band.
- "Female. Upperside with the basal two-thirds pale silvery blue, the apex and outer margin broadly brownish-grey. The underside resembles the male, but is rather paler."

Hab. Humboldt Bay, New Guinea, Sept.-Oct., 1892 (Doherty).

In the Collections of the Hon. Walter Rothschild.

"Four males and three females are in the Collection. It is nearest to H. Protogenes, Feld. [from Waigiou], the type specimen of which, a female, in the Felder Collection at Tring, is now before me. In this specimen the pale blue area on the upperside is considerably more restricted, and the discal row of brick-red lunules on the underside of the posterior wings is nearer the outer margin, besides numerous other differences. There is no male of H. Protogenes in the Felder Collection." (H. G. S.)

IV.—HYPOCHRYSOPS SCINTILLANS. 6. Figs. 10, 11. 9. Fig. 12.

Miletus Scintillans, Butler, "Annals and Magazine of Natural History," ser. 5, vol. 10, p. 149 (1882); Hypochrysops Scintillans, H. H. Druce, "Transactions of the Entomological Society of London" (1891), p. 191.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside rich purplish-blue, the costa and hind margin of the wings black; anterior wings with the apex broadly black; posterior wings with the inner margin black, shading into greyish towards the fringes. Posterior wings dentated towards the anal angle.

Underside dove-colour, more or less varied with vellow, reddish-orange, and silvery-green or lilac. Anterior wings with the costal, discoidal and apical areas greenish-vellow, two silvery-green stripes diverging from the base, one below the subcostal nervure, edged above with black; the other traversing the middle of the cell, and edged below with orange, and then with black. Beyond the first stripe are two detached masses of silvery or purplish scaling, running obliquely towards the costa. Beyond the second stripe is a broad transverse orange band, followed by a square mass of greenish-silvery scaling, inclining to lilac on the edges, and partly intersected with yellow in the middle. Beyond this again is an orange band, running obliquely towards the hind margin more than half across the wing, and bordered on both sides with black; between its upper end and the costa are two patches of lilac metallic scaling. There is also a submarginal row of five lilac-silvery spots between the veins, each slightly marked with black on the inner edge. The space between the cell and the inner margin is dove-colour. Posterior wings yellowish-grey towards the base; a reddish-orange stripe at the base of the costa, edged below with silverygreen; followed by three rather irregular reddish-orange bands, broadly edged with silvery-green; the third commencing on the costa with a transverse detached oval blotch. Beyond these is a buff-coloured space, followed by a black, partly macular line, an orange space, a series of metallic lilac streaks, and a buff space extending to the black line on the fringes.

Body black above, yellowish-grey below. Antennæ black, banded with white beneath, and tipped with pale orange-tawny.

Female. Upperside. Anterior wings dark brown, with a large pear-shaped white spot, in which the nervures are yellow, extending from the base over the disc. Posterior wings ashy-grey, with a whitish spot at the tip, and the nervures yellowish towards the margins.

Underside nearly as in the male, but on the anterior wings, the space vol. II., october, 1894.

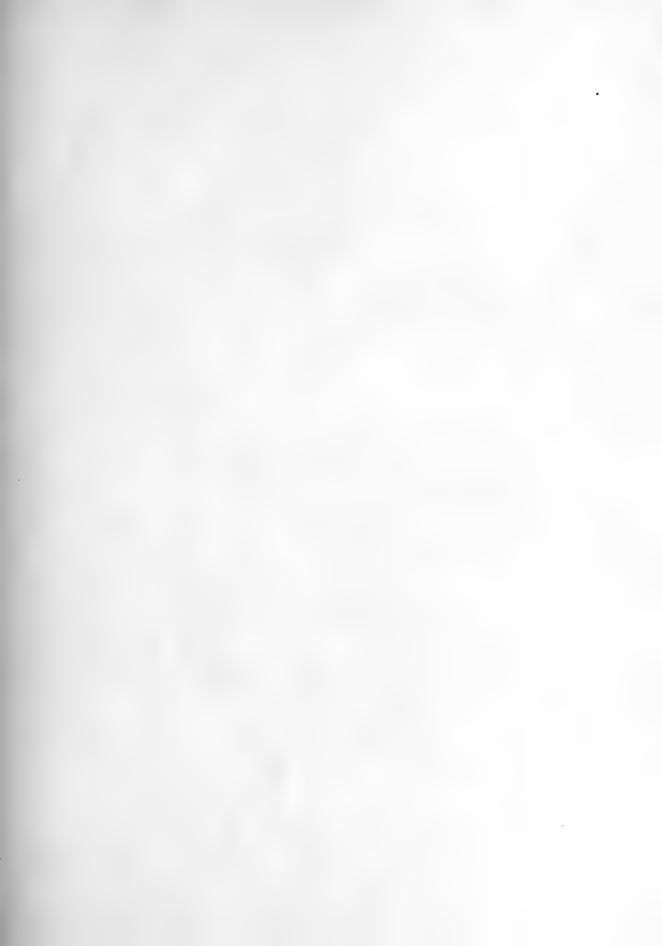
between the lower silvery stripe and the median nervure is almost entirely blackish, and the space between the cell and the inner margin is white, instead of dove-colour. On the posterior wings the ground-colour is rather darker than in the male, and the fourth orange band is nearly interrupted in the middle. The legs are grey, and the palpi are whitish beneath.

Hab. New Britain (Webster, 1894).

In the Collections of the British Museum (Natural History), the Hon. Walter Rothschild, Mr. H. Grose Smith, and others.

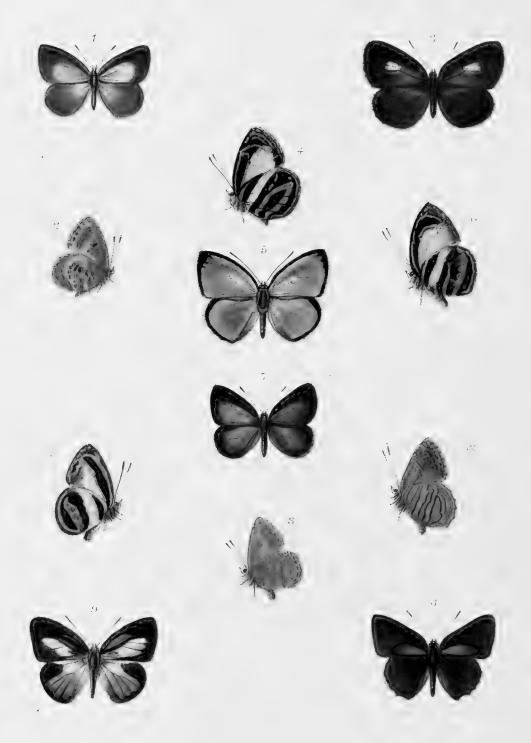
"This species is allied to *H. Anacletus*, Felder, but is of a lighter blue above, and the red bands below are larger and of a more fiery-red colour" (H. H. Druce).

The female has not been described before.



ORIENTAL LYCAENIDAE H.

Hindon III. Marine II



West Newman

THEOPHANES 1.2. "

THEOPHANES 1.2. "

THEOPHANES 2.4. "

THEOPHANES 3.4. "

THEOPHANES 3.

7,8 HYPOCHRYSOPS HERMOGENES &

LYCÆNIDÆ (ORIENTAL).

PLATE II.

HYPOCHRYSOPS. II.

V.—HYPOCHRYSOPS PRETIOSUS. 9. Figs. 1, 2.

Hypochrysops Pretiosus, H. Grose Smith, "Novitates Zoologicæ," I., p. 548, n. 183 (April 16, 1894).

Exp. $1\frac{1}{8}$ inches.

Female. Upperside brown, anterior wings with the lower part pale blue from the base to three-fourths of their length, from the inner margin to the middle of the cell, and the disc below and beyond; posterior wings pale blue from the base nearly to the middle, from the costa to the submarginal nervure. It resembles the females of H. Thesaurus Grose Smith and H. Protogenes Felder, but differs from the former in the blue area being more restricted, and from the latter only in the shape of the wings, which are more rounded.

Underside. Both wings darker than either of the above-mentioned species, anterior wings more extensively irrorated with grey scales in the area on the disc, in which is situate a row of fulvous lunules, which in *H. Protogenes* are situated nearer the outer margin, and extend to the costal margin in a line parallel with it. In *H. Pretiosus* these lunules towards the apex curve inwardly, and do not extend beyond the upper discoidal nervule, the fulvous band in the cell is darker, and beyond the end of the cell is a broad dark bar, the metallic spots in the submarginal row are larger, tipped internally with black spots with fulvous lines beyond, those between the median nervules being much the largest. On the posterior wings the bars across the wings are bright ochraceous, instead of brick-red as in *H. Protogenes*, the metallic lines and spots are much wider, the space between the second and third ochraceous bars which cross the cell being entirely metallic; at the end of the cell are two very conspicuous black bars.

Body brown or grey, paler beneath, thorax pale blue above; antennæ slender, tipped with rufous; orbits and palpi beneath, white; antennæ and legs black, banded with white.

Hab. Korrido (Doherty).

In the Collection of the Hon. Walter Rothschild.

VI.—HYPOCHRYSOPS THEONIDES. 9. Figs. 3, 4.

Hypochrysops Theonides, H. Grose Smith, "Novitates Zoologice," I., p. 549, n. 187 (April 16, 1894).

Exp. $1\frac{1}{2}$ inches.

Female. Upperside dark brown, anterior wings dusted with creamy-white below the cell; the lower half of the cell is also dusted with white, beyond which in the middle of the disc is a whiter and broader pale area. The upperside resembles that of H. Theon Felder, \mathfrak{p} , but the pale area in the middle of the anterior wings is very much more restricted, and the posterior wings are only slightly paler than the rest of the wings above the first subcostal nervure, where the white band of the underside shows indistinctly through the wings.

Underside. Anterior wings white (though less broadly than in H. Theon, 9), the costal area as far as the upper half of the discoidal cell, and the hind margin blackish brown with metallic markings, but shading into buff externally, to the fringes, which are blackish, irregularly tipped with whitish. The subcostal nervure is bordered on both sides with a broad metallic blue band (greener towards the base), and there is a metallic green band running from the base through the middle of the cell, which curves upwards, somewhat beyond the cell, to the subcostal metallic band. From this point the latter curves downwards to above the upper median nervule, where it is united by a short line to another metallic-blue stripe curving from the costa. Below the point of junction, and between the two upper median nervules is a large metallic patch, which in H. Theon is only represented by a small spot. Posterior wings black, with broad metallic markings; there is an oblique white stripe near the base, narrower than in H. Theon, and narrowly bordered above, and in the basal half below with metallic-blue; a broad metallic stripe runs from the base along the costa to the middle of the costal part of the white band, where it ceases; its outer portion is bordered with white above. Beyond this point, commences a submarginal metallic stripe, slightly cut by the nervures, the uppermost section being detached; outside this, the wing is lighter brown; fringes white, spotted with brown on the nervures; scarcely marked with white on the anterior wings. On the inner margin is a broad metallic-greenish stripe, from which two more proceed, which unite before reaching the submarginal stripe; the lower one is edged with blue internally. About the middle of the upper stripe it throws off a narrower branch towards the apex of the wing; and above the point where the two broad bands unite is a large metallic spot between the subcostal nervules.

Body black above, thorax slightly tinged with pale blue. Antennæ black, slightly banded with white beneath; orbits, palpi beneath some oblique bands on the pectus, and a broad band at the base of the tibiæ, white; abdomen more grey beneath.

Hab. Ron (Doherty).

In the Collection of the Hon. Walter Rothschild.

One specimen only. It somewhat resembles *H. Doleschallii* Feld. Q, but it is without the blue suffusion on the upperside of the anterior wings, and on the underside the metallic bands and markings on both wings are much broader and more conspicuous. "It is not improbable that it may be the Q of *H. Theophanes*, but there are several differences, which have led me to consider it a distinct species." (H. G. S.)

VII.—HYPOCHRYSOPS THEOPHANES. &. Figs. 5, 6.

Hypochrysops Theophanes, H. Grose Smith, "Novitates Zoologica," I., p. 550, n. 188 (April, 1894).

Exp. $1\frac{3}{8}$ inches.

Male. Upperside. Both wings more purplish blue in H. Theon Felder, and the wings are broader; on the anterior wings the pale central streak covering the lower half of the cell and extending beyond it, is much more restricted than in H. Theon, and the apex and outer margin are much more narrowly black.

On the posterior wings the blue area extends nearly to the apex, the costal margin is dusky brown, and only slightly grey towards the base, the outer margin is more narrowly black, and the wings are less rounded at the anal angle.

Underside. Anterior wings with the black band which extends over the costal area and the upper part of the cell broader than in *H. Theon*, and the metallic lines on each side of the band broader and more conspicuous; the metallic line on the inner side of the band is continued uninterruptedly round

it till it joins the metallic line on the other side; at the lower end of the black band is a large patch of metallic bluish green scales. In *H. Theon* the lower metallic line ceases at the end of the cell, and the black band towards the apex is intersected by a narrow curved metallic line, which is not the case in *H. Theophanes*. Posterior wings resembling those of *H. Theon*, but the sub-basal black band is broader, and is bordered externally by a narrow but very conspicuous metallic line; the submarginal black band on the outer part of the disc is much wider between the median nervules than in *H. Theon*.

Body brown above and on the sides, yellowish white below, thorax above slightly greenish blue, with grey hairs before and behind, head spotted with greenish blue above, orbits in front, and palpi beneath white, antennæ and abdomen narrowly ringed with white.

Hab. Humboldt Bay, Dutch New Guinea (Doherty).

In the Collection of the Hon. Walter Rothschild.

Four specimens received, all males.

VIII.—HYPOCHRYSOPS HERMOGENES. &. Figs. 7, 8.

Hypochrysops Hermogenes, H. Grose Smith, "Novitates Zoologicæ," II., p. 548, n. 184 (April 1894).

Exp. $1\frac{1}{8}$ inches.

Male. Upperside dull purple, the costal and apical area of the anterior wings broadly, and the outer margins of both wings less broadly brownish black.

Underside dull ashy brown. Anterior wings with an ochraceous band traversing the upper side of the cell from the base to a little beyond it, when it bends downwards at right angles to the upper median nervule, a blunt ochraceous spur from this bar crosses the cell at about its middle, the band and spurs are bordered on each side by metallic greenish-blue lines, the disc is crossed beyond its middle, from the costa near the apex, to the lowest median nervule, by a row of ochraceous bars, there is a submarginal row of metallic spots surrounded by ochraceous rings, and tipped internally with black, and there are several metallic spots on the costa towards the apex. Posterior wings crossed by five rufous nearly parallel bars margined by metallic lines, a submarginal row of metallic oblong spots capped with black, and with narrow ochraceous lines inside; a narrow ochraceous band on the margin.

Body brown, paler beneath, antennæ black, flagellum ringed with white, club

rather stouter than in the allied species, face mostly buff, legs buff, banded with black, abdomen purplish.

Hab. Humboldt Bay, Dutch New Guinea (Doherty).

In the Collection of the Hon. Walter Rothschild.

In the arrangement of the bars on the underside of the posterior wings there is some resemblance to *H. Narcissus* Feld., but in that species the bars are more or less broken up into spots, and in other respects *H. Hermogenes* is quite different.

IX.—HYPOCHRYSOPS HEROS. 6. Figs. 9, 10.

Hypochrysops Heros, H. Grose Smith, "Novitates Zoologica," I., p. 550, n. 189 (April, 1894).

Exp. $1\frac{1}{2}$ inches.

Male. Upperside. Anterior wings dark brown, the cell blue, a broad white bar crosses the disc between the uppermost median nervule and the submedian nervure; the lowest median nervule, the submedian nervure, and a broad band on the inner margin blue; the disc beyond the white band broadly blue. Posterior wings with the base mouse-colour, bordered beyond with blue; beyond this is an oblique white band, extending along the inner margin; the outer part of the wing is black, with a brilliant metallic blue patch which covers the space between the upper median nervule and the submedian nervure, the nervures crossing the blue patch are black; the median nervure itself has a short blue line beneath.

The upperside resembles *H. Herdonius*, Hew., but differs as under:—On the anterior wings the white central space is narrower, and more restricted, and the iridescent blue bands in the cell, and on the outer and inner sides of the central white space are broader. On the posterior wings the white basal space is also more restricted, and the iridescent blue patch which extends over the disc from the discoidal nervule to the submedian nervure is divided only by the black nervures.

Underside. Both wings differ very materially from *H. Herdonius*. On the anterior wings the whole of the cell and the space beyond it to near the apex are velvety black, the costal region, apex, and outer margins are cinereous black, the black outer marginal space extending inwards and becoming grey towards the middle of the disc and the outer margin; the black velvety space in the cell and beyond is broadly bordered on each side and at the outer end by

metallic blue, except below the cell, where it is narrowly bordered by that colour, and there is a submarginal row of narrow metallic blue lines. A white band, broadest in the inner margin, covers the inner half of the disc, commencing at the upper median nervule. Posterior wings with a sub-basal velvety black bar, the space above which, to near the costal margin which is black at the base, and thence round the bar to the inner margin, is metallic blue; beyond this, crossing the cell, and extending from the costal to the inner margins, is a broad white band; the space thence to the outer margin is black, bordered on its inner edge by a metallic blue line extending from the inner margin to the end of the cell, and crossed about the middle by a broad band of metallic blue nearly straight on its outer edge, but very irregular on its inner edge, and widest in the middle; there is a rather broad metallic blue band a little before the outer margin.

Body blackish, thorax greenish blue, antennæ black, club rufous below, and at the tip above; orbits metallic blue; thorax greenish blue above; pectus and abdomen beneath mostly white; the latter narrowly ringed with white above; palpi and legs streaked with white, tarsi dull ferruginous.

Hab. Humboldt Bay, Dutch New Guinea, Sept.-Oct., 1892 (Doherty).

In the Collection of the Hon. Walter Rothschild.

There is one specimen only of this very beautiful insect.

X.—HYPOCHRYSOPS SIREN. &. Figs. 11, 12.

Hypochrysops Siren, H. Grose Smith, "Novitates Zoologicæ," I., p. 551, n. 190 (April, 1894).

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Both wings brown-black. Anterior wings with a patch of iridescent bluish green below the cell, occupying the space between the lowest median nervule, at about half its length, and the submedian nervure, and thence to the base, with a streak of the same colour below the submedian nervure. Posterior wings suffused in certain lights with a patch of brilliant purple, which extends over the cell, beyond it at its lower end halfway over the disc, and below it nearly to the submedian nervure.

Underside. Anterior wings tawny brown; the space in the cell is metallic greenish golden, with a broad ochreous band running through it from the base, and extending beyond it above the upper discoidal nervule to a little distance

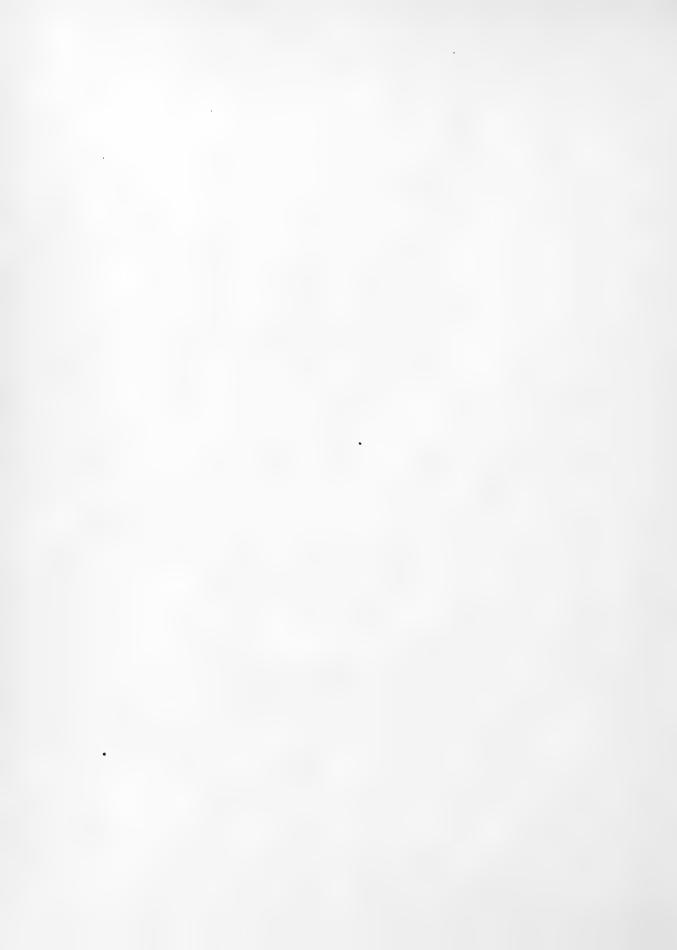
from the apex, where it ceases, and is bordered outwardly with a narrow black line; at the end of the cell, the ochreous band has a spur on each side forming an irregular cross; the upper spur extends nearly to the costal margin, which is broadly ochreous, the lower spur crosses the end of the cell, and is bordered on each side with black; below this are two ochreous spots likewise bordered with black, and situated in the angles between the median nervules at their junction with the median nervure; there is a large patch of greenish golden at the outer side of the lower spur; above the subcostal nervure is a broad streak of greenish golden followed by two greenish golden spots above the upper discoidal nervule, the inner spot oblique; above these spots are three smaller greenish golden spots situated between the third and fourth subcostal nervules; on the disc about halfway between the discoidal and median nervules are four contiguous ochreous lunules bordered on each side with black; the outer margin is rather broadly pale ochreous, with five greenish golden spots on its inner side, crowned internally with black, and situated between the nervures from near the apex to the lowest median nervule. The posterior wings are crossed by four ochreous bars bordered with black on each side, the space between the bars being greenish golden; the lowest bar forms a loop commencing on the second subcostal nervule where it touches the third bar, thence in a curve following the outline of the outer margin to a little above the anal angle, the outer margin is ochreous, with a row of greenish golden spots on its inner side, which are bordered on each side with narrow black lines, a narrow black line between the two lowest median nervules, which is situated inside the gold spot between these nervules; there is a basal ochreous streak on the costal margin. The outer margin is serrate, the tips of the nervures black.

Body brown, thorax metallic green above, face and undersurface of body mostly grey; antennæ black, ringed with white; legs striped and ringed with grey; front tarsi ringed with white.

Hab. Gani (Doherty).

In the Collection of the Hon. Walter Rothschild.

One specimen only; it is one of the most gorgeous species of this beautiful genus.



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PLATE III.

HYPOCHRYSOPS. III.

XI.—HYPOCHRYSOPS DRYOPE. &. Figs. 1, 2. Q. Fig. 3.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside bright blue, shading into purplish in some lights. Anterior wings with the costa, apical portion beyond the cell, and hind margin broadly blackish. There are some detached greenish scales among the blue; but these may possibly be due to abrasion or discoloration, as they do not appear to be symmetrical on both sides. Posterior wings strongly but somewhat irregularly dentated, almost lobate at the ends of the nervures towards the anal angle, and with the costa and inner margin broadly, and the hind margin more narrowly, blackish.

Underside. Anterior wings with the upper half pale vellow, the lower half slaty-grey, darkest towards the base. Along the subcostal nervure a pale metallic-green line runs from the base, ending in two short dashes followed by two rounder ones, the latter of a very pale silvery blue. The upper half of the cell is pale yellow, below which, at about a quarter of its length, commences a pale metallic-blue line, which curves downwards at the end, but does not reach the end of the cell. Below this, the lower half of the cell is dull reddish above, and dark grey below. Beyond the cell, and below the first of the two round silvery spots following the subcostal stripe, is a transverse silvery stripe, edged outside by a narrow blackish line across the end of the cell. Beyond this is a rufous band running from the costa to about half the width of the wing; its lower end is pointed, and slightly turned outwards. It is bordered with pale blue metallic spots of different shapes, separated by the nervures, and narrowly surrounded with black; on the inner side, however, below the first two, they are reduced to a few metallic specks on a black ground. There is also a reddishvellow marginal band, ceasing below the lowest median nervule, and marked VOL. II., APRIL, 1895.

with five pale silvery blue spots, the three uppermost slightly marked outside with black, the four uppermost indented with black on the inner side, and the two lowest longer than the others; the portion of the band around them is darker than above, and is edged on the inside with black. Fringes irregularly black and white. Posterior wings pale straw-colour, costa reddish on the basal third, edged below with a black line, speckled with metallic particles; four irregular reddish bands running from the inner margin, more or less bordered with pale metallic silvery green, and interspersed with light brown and black; the first band is broad, running from the base of the inner margin half across the wing; the second and third unite towards the costa, which they do not quite touch, the outer one being much varied and broken with light brown; the fourth is marginal, and is more yellow; it is connected with the third at both ends, but does not extend to the apex of the wing; it contains a series of long pale silvery blue spots between the nervure. Fringes black, marked at their ends with white between the nervures; a continuous dark brown line runs at the base of the fringes, and the lobes are conspicuously black.

Body black above (probably metallic-blue when fresh), buff below; antennæ black, spotted with white below; tip rufous.

Female. Upperside greyish-black; anterior wings with a lilac-blue patch extending over the basal two-thirds, from the middle of the cell to the inner margin. Posterior wings more or less purplish-blue from the base along both sides of the median nervure and its branches.

Underside nearly as in the male; anterior wings with the lower half of the cell but slightly marked with reddish; the red transverse band paler, and more broadly bordered with black; two additional metallic spots in the submarginal band towards the hinder angle; posterior wings with the red bands more brightly coloured, and more sharply defined irregular black markings in the third band, but no brown ones.

Hab. Konstantinhafen, New Guinea (Kubary, 1893).

In the Collection of Dr. Staudinger and H. Grose Smith.

XII.—HYPOCHRYSOPS CHRYSARGYRA. Figs. 4, 5.

Exp. 11 inches.

Upperside reddish fulvous. Anterior wings with the costa, apex, and hind margin blackish, the nervures and inner margin narrowly lined with black. The

black on the costa narrows and ceases on the subcostal nervure towards the base; the base, and a short band on the basal fourth of the costa, dull rufous. Fringes narrowly rufous. Posterior wings of a slightly duller fulvous than the fore wings; costal area brown, nearly to the tip; the principal nervures more or less lined with black; fringes narrowly rufous, with a black line at the base; but the fringes are very long towards the anal angle, where they form a very large black lobe, and a smaller one above it; between these, their ends are whitish. Inner margin greyish-brown, the fringes lighter. There is also a submarginal black stripe, broadest below, from below the black lower branch of the subcostal nervure nearly to the anal angle.

UNDERSIDE. Anterior wings brown on the upper half, dusted with purplishgrey beyond, and of a clear yellowish-buff on the lower half. Base with a brilliant metallic-green band above and blackish below; beyond this is a small transverse metallic-green spot in the cell, followed by a broad transverse band of the same colour at the end of the cell. Beyond this is an irregular metallicgreen mark below the subcostal nervure connected by a short line with another broad transverse metallic band running from the subcostal nervure (above this is a buff stripe on the costa) to the middle submedian nervure. On their lower edges the two transverse green bands are connected by the upper part of an irregular black patch, the upper part of which is produced to touch the outermost. Beyond the outermost metallic band is a brown band, bordered with zigzag black lines; this is continued between the two lower median nervules by two broad black curves, separated by a reddish-brown curve, and the innermost black curve is continued to the submedian nervure by a black curve, nearly obsolete in the middle. Inner margin pale vellowish-grey. Posterior wings light brown for nearly two-thirds of their length from the base, where they are crossed by an irregular and interrupted black line, edged on the outside towards the inner margin with brilliant metallic green. From the base of the costa a broad metallic green band runs obliquely to the median nervure, and an irregular row of large metallic green blotches runs from below the subcostal nervure before the middle, across the wing, and finally turns towards the base of the inner margin; most of these spots are edged with brown. Beyond the dividing line previously mentioned, the wing is varied with purplish-grey; towards the hind margin it is again darker brown, and towards the anal angle inclining to ferruginous. There is a macular metallic blue submarginal line towards the anal angle, mostly edged within with irregular black spots; this is continued above by three small coppery dots between the nervures. A black line runs at the base of the fringes, which expands into black spots on the nervures, and on the fringes of the lobes; the fringes are otherwise light brown, or grey on the inner margin.

Body brown above; antennæ black, ringed with white; club long, ferruginous, except at the base, above; orbits and legs ochreous; females streaked with brown.

Hab. New Guinea (Kubary).

In the Collection of Dr. Staudinger.

XIII.—HYPOCHRYSOPS DICOMAS. Figs. 6, 7.

Hypochrysops Dicomas, Hewitson, "Transactions of the Entomological Society of London," 1874, p. 350; H. H. Druce, op. cit., 1891, p. 185.

Exp. 1 inch.

Female (?). Upperside dull brown.

Underside. Rufous-orange. Anterior wings mostly grey below the cell, and the median nervure, and on the inner two-thirds of the space between the two lower median nervules; the space below is entirely grey, except as far as the submedian nervure, where the rufous-orange descends narrowly on the hind margin. The costa is also partly edged with grey. There are two pale silveryblue streaks running from the base; the uppermost extends along the submedian nervure for nearly half the length of the wing. There are three small silveryblue subcostal spots between the second and third subcostal nervules. The second basal stripe runs through the middle of the cell, dips downwards at two-thirds of its length, and then curves suddenly down to the base of the two upper median nervules. Beyond this is a broad metallic bar closing the cell, and beyond and above this are two rather large metallic spots, close together, the outermost being below the second subcostal spot, and edged within, like it, with black. Beyond these is a row of four irregularly-arranged metallic spots running obliquely inwards; the first subcostal and oblong, narrowly bordered with black outside, the second and third nearly square, close together, the lower inner corner of the second only separated from the outer upper corner of the third by the second discoidal nervule; the fourth also square, much nearer the base, between the two upper median nervules. There is also a submarginal row of five metallic spots, each intersected by a small black spot on the middle of its inner side. There are traces of a sixth metallic spot at the commencement of the grey space below the others. Posterior wings rufous-orange, with three metallic bands towards the base, the first subcostal, the space above it redder than the rest of the wing, the second oblique, nearly reaching the extremity of the first, the third nearly complete. Beyond these are rows of long metallic spots, the first consisting of one on the costa and three on the inner margin, the second consisting of three on the inner margin, the fourth consisting of a stripe across the end of the cell, a small round one below it, and three long spots, one beyond the level of the small one, and the others successively nearer the base and the inner margin; there is also another isolated long spot between the cell and the submarginal row of six long spots, within which, on the inner margin, is a long pointed streak. Fringes damaged, apparently grey, with black tufts at the ends of the nervures, especially towards the anal angle of the posterior wings.

Body brown above, grey beneath, face ochreous, antennæ and palpi above, black; the former tipped with ochreous, and banded with grey.

Hab. Waigiou (Wallace; type in the Hewitson Collection in the British Museum).

Mr. Hamilton H. Druce remarks, "It bears a superficial resemblance to some butterflies of the family Erycinidæ, viz., Anteras Acanthus, Cram., and A. Acanthoides, Herr.-Schäff., but without the tails." If the fringes were perfect, this resemblance would probably be lessened. The specimen was described by Hewitson as a male, but appears to be a female.

XIV.—HYPOCHRYSOPS EPICURUS. 9. Figs. 8, 9.

Hypochrysops Epicurus, Miskin, "Transactions of the Entomological Society of London," 1876, p. 455; Hamilton H. Druce, op. cit., 1891, p. 186.

Exp. $1\frac{1}{4}$ inches.

Female. Upperside brown, with the base of the anterior wings towards the inner margin, and the hind wings in and below the cell to the submedian nervure, to beyond the middle, suffused with violet-blue. Fringes grey or ochreous-grey, with a black line at their base, most distinct on the posterior wings, where the black line expands into black tufts at the ends of the median nervules, and the submedian nervure, all which are bordered with ochreous stripes, widely expanded at the extremity.

Underside drab. Anterior wings with three light metallic-green subcostal lines, the first short, about one-fifth of the length of the wing; the second running below the subcostal nervure for about half the length of the wing; ycl. IL, April, 1895.

towards its extremity it exhibits a tendency to become macular, and is followed by two metallic dots, one below the other; the third runs through the middle of the cell, and is slightly curved downwards at two-thirds of its length, nearly touching a round black spot, more or less surrounded with metallic spangles; at its extremity, this line curves downwards at a right angle across the cell, and is slightly edged on the outer side below with black. Below the black metallicbordered spot in the cell is a black spot, between the median and submedian nervures; and below the terminal branch of the metallic stripe in the cell is another black spot, marked outside with two metallic spots, between the two lower median nervules. Beyond the terminal branch of the metallic stripe is a bar, metallic-green outside and black inside. There are also two rows of about six spots each between the cell and the hind margin. The inner one consists of metallic spots more or less bordered with black, from the lowermost of which a black line runs towards the inner margin. Beyond these is a pale orange space, bordered outside on its lower part by a slender black line. The marginal area is pale orange, on which stand the large metallic submarginal spots, within which is a row of black spots, some of which touch or partly intersect the metallic ones; the middle spots are also narrowly edged with black on the outside. Posterior wings with four pale orange bands, bordered on both sides with long metallic spots; the fourth band is incomplete, and is bordered only by three or four metallic spots on the inside, and a more or less distinct black line on the outer side. There is also a row of submarginal orange-red spots, bordered outside by metallic ones, and these again by a pale orange stripe at the base of the fringes; the last two or three spots towards the anal angle are marked with black spots on the inner side, one of which is very large and conspicuous.

Body brown above, grey beneath; thorax dark blue above, light blue beneath; antennæ and palpi black, ringed with white, the latter whitish beneath; club of antennæ ferruginous beneath and at the extreme tip.

Hab. Brisbane, Queensland (Miskin); Morty Island (Hewitson Collection).

In the Collections of Mr. Miskin and Mr. Hewitson (British Museum).

"In form this species is nearest to H. Ignita (Leach), but is a much more homely-looking insect" (Miskin).

From Miskin's description the sexes do not seem to differ much. Mr. H. H. Druce gives the locality of the Hewitson specimens as Moreton Bay; but one of them is labelled "Mort," which we suppose to mean Morty Island.

XV.—HYPOCHRYSOPS REGINA. &. Figs. 10, 11.

Exp. $1\frac{2}{3}$ inches.

Male. Upperside dark brown. Anterior wings with the cell, and two-thirds of the length of the wing below it filled up with silvery blue. Posterior wings filled up with silvery blue from the base between the subcostal and submedian nervures nearly to the extremity, a black line at the base of the fringes, edged within towards the anal angle with orange-tawny.

Underside greyish-orange, paler in the middle of the anterior wings. Below the costal line, as far as the middle of the cell, the wing is traversed by two coppery-green lines from the base, one below the subcostal nervure, ceasing at one-third of the length of the wing, and continued beyond by some irregular spots; the other in the cell is narrowly edged above with black, and ends in a curve; at two-thirds of its length it forms a deep loop downwards, nearly to the median nervure, the loop being filled up with black. The disc is crossed by an orange-red band, running from the second subcostal nervule to the submedian nervure, imperfectly interrupted on the nervures, and edged with narrow black, and light metallic lines; the lowest part is narrower, semi-detached, and edged with black only. There is a marginal orange-red band, composed of spots, between the nervures, and divided into two rows by a light metallic line. These markings likewise cease at the submedian nervure; the two lowest spots of the innermost series are bordered by a black line on the inside; and the outer row is bordered outside by a continuous black line at the base of the light brown or greyish fringes. Posterior wings light greyish-brown, crossed by seven bands of reddish-orange, more or less interrupted or divided into spots by the nervures, the middle ones being narrowly edged with black and light coppery-green metallic lines. The first band is at the base of the costa; the second runs near the base of the wings; the third consists of two long spots between the costal and submedian nervures; the lower end of which is nearly united by a branch to the fourth, which extends from below the fork of the subcostal nervure to the inner margin, along which a line runs connecting this with all the outer bands. The fifth consists of three elongate spots, the first spot costal, separated from the second by the space between the subcostal nervules; the second spot almost divided by a constriction in the middle; the third spot distinctly divided, and more outwards, forming the common termination of the fifth and sixth band; the latter extends from the upper subcostal nervule to the lowest median nervule. The submarginal and marginal markings, which include the

seventh band, are nearly the same as on the fore wings, except that the inner spots are not bordered within with black, and that the bisecting metallic line is rather broader, and edged outside with a black line.

Body grey above, white below. Antennæ orange-brown, ringed with white.

Hab. Moluccæ.

In the Felder Collection in the Hon. Walter Rothschild's Collection at the Tring Museum.

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PLATE IV.

THYSONOTIS. I.

I.—THYSONOTIS DISPAR. & Figs. 1, 2. & Figs. 3, 4.

Exp. about $1\frac{1}{2}$ inches.

Male. Upperside. Anterior wings lilac-blue, lighter than in T. Apollonius, Feld.; costa and outer margin narrowly black; the white band which runs from the inner margin towards the tip in some of the allied species only just indicated. Posterior wings light blue at the base, followed by a very broad white band, slightly suffused with light blue to beyond the middle, followed by a black border, which is suffused with lilac-blue from below the costa for three-quarters of its length towards the anal angle.

Underside. Anterior wings brownish-black, with a broad, slightly metallic azure-blue band, nearly obsolete opposite the apex, where it curves round, and forms a narrow submarginal band. A white tapering band runs upwards from beyond the middle of the inner margin towards the apex. Posterior wings black at the base and hind margin, crossed by a broad central creamy-white band. There is a short azure-blue band at the base, and a row of large circular black submarginal spots, imperfectly surrounded with azure-blue.

Body and antennæ black, orbits blue, thorax with long bluish hair in front and whitish hair behind; abdomen white beneath, and blue at the base above.

Female. Upperside dull brownish-black, with a narrow central white band on all the wings, much dusted with brown; on the anterior wings it is curved, and though it does not extend to the costa it approaches more nearly to it than in the same sex of the allied species.

Underside nearly as in the male, but the ground-colour is blacker. On the posterior wings the central band is narrower, and is white, without any creamy tinge. The abdomen is narrowly banded with white above.

VOL. II., JULY, 1895.

Hab. New Britain (Rev. R. H. Rickard, and Captains Cayley Webster and Cotton).

In the Collection of Mr. H. Grose Smith. Allied to T. Glaucopis, Grose Smith.

II.—THYSONOTIS HERMES. 8 Figs. 5, 6. 9 Figs. 7, 8.

Thysonotis Hermes, H. Grose Smith, "Novitates Zoologicæ," I., p. 575 (July, 1894).

Exp. $1\frac{3}{4}$ inches.

Male. Upperside. Both wings resemble T. Apollonius, Felder, from which species it differs as under: the blue area on both wings is duller and more greenish, the white area is stramineous, and the dark outer-marginal area is browner black, the costa and outer margins of the anterior wings being much more broadly brown-black. The cilia are brown, much less distinctly marked with white between the veins.

On the UNDERSIDE similar differences occur on both wings; also on the anterior wings the white area is more extended towards the apex, where it terminates more acutely, and on the posterior wings the blue submarginal band is narrower and of more uniform width, and the black spots in it between the veins are larger and more extended inwardly, occupying a much larger space in the blue band, which is a deeper blue than in *T. Apollonius*.

Female. The UPPERSIDE is more fuliginous-brown, the dusky pale band across both wings being also more fuliginous and obscured; the cilia on both wings are much less distinctly marked with brownish-white between the veins, being scarcely visible.

On the UNDERSIDE corresponding differences occur, the white bands being stramineous, terminating more acutely towards the apex of the anterior wings; the dark area is browner black, and the blue bands deeper blue. The blue band on the posterior wings is narrower and more uniform in width, with the black spots in it larger, as in the male.

Hab. Korrido and Biak, two islands situate to the north of Jobi Island.

In the Collection of the Hon. Walter Rothschild and Mr. H. Grose Smith.

It is an insular form of T. Apollonius or T. Philostratus, Feld., the blue on the upperside of which latter species is more purple than in T. Apollonius, and the underside of which very closely resembles T. Hermes.

III.—THYSONOTIS GLAUCOPIS. &. Figs. 9, 10. Q. Figs. 11, 12.

Thysonotis Glaucopis, H. Grose Smith, "Novitates Zoologicæ," I., p. 575 (July, 1894).

Exp. 13 inches.

Male. Upperside. Differs from T. Wallacei, Felder, in both wings being more rounded, and the anterior wings being more uniformly and darker blue. On the posterior wings the pale area towards the base is much more restricted and less distinct, and the dark marginal area is much narrower towards the anal angle.

UNDERSIDE. On the anterior wings the blue band extends along the outer margin nearly to the outer angle, the space beyond it being dull blackish-grey, and the white area on the disc is much more restricted. On the posterior wings the white band across the wings is narrower. The blue band which crosses the disc is narrower, and is broken up into conical spots, divided by the nervures, and centred with black spots, which are less elongate than in T. Wallacci; the colour of this band is deeper, and somewhat violaceous-blue.

Head black, orbits blue, antennæ black, ringed with white; thorax with bluish hair above, blackish beneath; abdomen blackish above and white beneath.

Female. Upperside. Both wings more rounded than in T. Wallacei, and the pale spaces much browner and more restricted; the cilia less conspicuously white.

Underside. Resembles the male, and differs from the female of T. Wallacci in a similar way, the white area in both wings being more restricted.

Body with the abdomen more distinctly ringed with white above than in the male.

Hab. One male from Wandesi, and a long series from Humboldt Bay.

In the Collections of the Hon. W. Rothschild, Dr. Staudinger and Mr. H. Grose Smith.

The specimen from Wandesi is small, and on the underside of the anterior wings the dark costal and outer marginal band is narrower than in the other specimens.

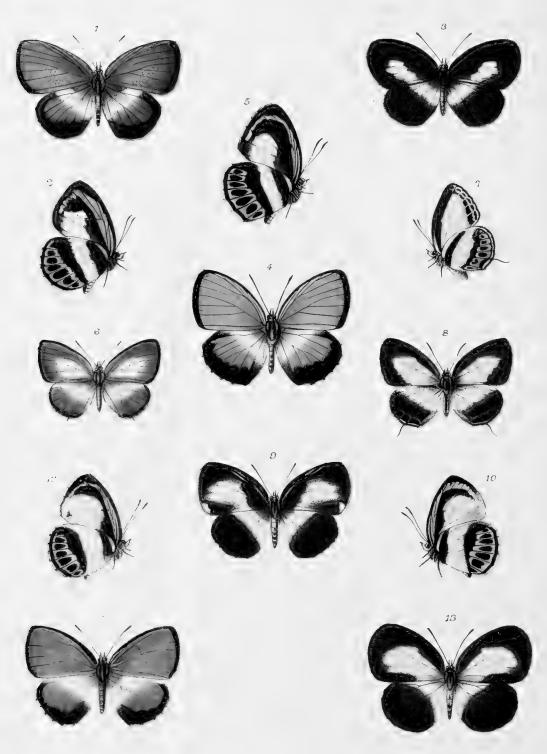
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ORIENTAL LYCAENIDAE V. THYSONOTIS, II.



Horace Knight del et lith.

West Newman imp

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4,5.	11	REGALIS, &.	11,12.	**	DRUCEI, &		
6,7.	13	CARISSIMA &.	13 .	39	,,		

LYCÆNIDÆ (ORIENTAL)

PLATE V.

THYSONOTIS. II.

IV.—THYSONOTIS PERI. & Figs. 1, 2. & Fig. 3.

Thysonotis Peri, 8. H. Grose Smith, "Novitates Zoologica," I., p. 590 (July, 1894).

Exp. about $1\frac{1}{2}$ inches.

Male. Upperside. Both wings darker-blue than in T. Glaucopis, Grose Smith (antea, p. 25, pl. IV., figs. 9, 10,) with the black outer margins more clearly defined on their inner edges. The white area of the underside is represented on the anterior wings by an irregular indistinct patch of white scales irrorated with blue scales, and on the posterior wings by a moderately well-defined white band before the middle, more or less densely dusted with blue scales.

Underside with the dark areas on both wings brighter black, the blue bands in which are brighter, and on the anterior wings the blue band which intersects the black costal area (which is very wide) is wider; the white spaces are more sharply defined, that on the anterior wings being truncated instead of rounded at its apex; and there are several irregularly-placed black spots in the white area, near the junction of the white with the black costal area on those wings. On the posterior wings there is, in addition to the subcostal blue streak, another blue streak on the inner margin at its base, and also a patch of blue scales which is situate on the outer edge of the black basal area at its middle, and partially invading the cell. The cilia are whiter than in T. Glaucopis, but less conspicuously so than in T. Wallacei, Felder.

Head and thorax blue above, black beneath; front femora clothed with whitish hair, abdomen greenish, blue on the basal segments, and black beyond, with bluish-white incisions; white beneath.

Female. Upperside black, fringes narrowly white. A well-defined, but vol. II., october, 1895.

rather narrow white band runs obliquely from below the upper median nervule of the anterior wings just beyond the cell, to the middle of the inner margin of the posterior wings.

Underside almost as in the male, but the white band is somewhat narrower, and does not extend above the upper median nervule on the anterior wings.

Body black above, vertex scaled with blue; beneath, femora clothed with white hair, and abdomen white; antennæ narrowly banded with white, and palpi varied with blue and white.

Hab. Stephansort, Dutch New Guinea (Captains Cayley Webster and Cotton).

The types are in Mr. Grose Smith's Collection; a pair are also in Mr. Rothschild's Collection, having been received from Dr. Staudinger.

It appears to be intermediate between T. Glaucopis, Grose Smith, and T. Wallacei, Felder.

V.—THYSONOTIS REGALIS. &. Figs. 4, 5.

Exp. $1\frac{1}{2}$ inches.

Male. Upperside rich blue, fringes white. Anterior wings with the costa narrowly, and the hind margin more broadly black, slightly powdered with metallic-green at the base, and for a short distance below; the posterior wings blue at the base, slightly powdered with metallic-green at the extreme base. Then follows an oblique white band, extending along the inner margin to the base. The outer part of the wing is blue, with a black border, extending from the commencement of the white band on the costa, to the anal angle, where it is very broad, and extends along the inner margin till it reaches the white band again.

Underside black, with blue and white markings. Anterior wings with a large white space resting on the outer part of the inner margin, and extending upwards to the level of the cell. A blue band, divided by the black nervures into long spots, runs from the base, and curves round the hind margin as far as the lowest median nervule. Posterior wings black at the base, with an inner blue band, and traces of an outer one towards the inner margin. Then follows a moderately broad oblique white band, the outer part of the wing is black, enclosing a row of large oval black spots, with oblong blue borders, separated from each other by the black nervures.

Wings rather broad; posterior wings distinctly denticulated. Head black

above, bluish-white below; antennæ black, with a long gradually-formed club, and banded with white below; thorax purplish-blue, with a greyish-white tuft behind; pectus black; abdomen black, greenish-blue at the base, and more or less white at the incisions; white beneath. The legs are damaged.

Hab. New Guinea (No. 437).

In the Collection of Dr. Staudinger.

A large species, allied to T. Wallacei, Felder, and T. Glaucopis, Grose Smith, to which it approaches very closely, but there is less indication of any white markings above, and the white space beneath is smaller.

VI.—THYSONOTIS CARISSIMA. &. Fig. 6. 9. Figs. 7, 8.

Exp. $1\frac{1}{6}$ to $1\frac{1}{4}$ inches.

Male. Upperside lilac-blue, with narrow black borders. Anterior wings with a large sub-triangular white patch, much dusted with blue along the nervures, spreading from the lower and outer part of the cell and beyond, to the submedian nervure. Posterior wings with a slender black tail at the extremity of the lowest median nervule, and with a moderately broad white oblique band towards the base, dusted with blue between the median and sub-median nervures, but white below, and extending over the whole inner-marginal area.

Underside. Anterior wings white, costal area with a broad band, greyish above, but black below, in and beyond the upper half of the cell. Fringes white, with a continuous black marginal stripe at their base, within which are two rows of submarginal black streaks between the white nervures, the outer ones sub-linear, but the inner ones becoming broad as they approach the inner margin. Posterior wings of a more creamy-white, the upper part of the base greenish, followed by a broad oblique band, not quite extending to the costa. Fringes whitish, with a black stripe as on the anterior wings, within which is a row of white streaks separated by the nervures, which are here brownish-grey, not white. Within these is a broad black band, cut by the brown nervures, and containing a row of semicircular black spots surrounded by metallic-green, shading into pinkish-white towards the costa.

Body blue and white above, mostly whitish beneath; antennæ black, banded with white below; face, palpi, and legs striped with black and white.

Female. Upperside white, with broad black borders, and bluish-green

towards the base. Posterior wings with a row of imperfectly-marked eyes on the border towards the anal angle, indicated by pale-blue crescents on the inner side, and slender white submarginal stripes on the outer side. Tail long, slender, black, tipped with white.

Underside nearly as in the male.

Head black above, orbits, cheeks, and bands on scape of antennæ beneath, white. Thorax pale greenish-blue above; abdomen brown. Body mostly whitish beneath; legs black, slightly lined and spotted with white.

Hab. Pura, October, 1891, and Wetter, May, 1892 (Doherty).

In the Collection of the Hon, Walter Rothschild and H. Grose Smith.

This pretty little species is probably allied to Lycaena Alevas, Felder, but is very distinct; inter alia, the metallic markings of the undersurface are coppery green, instead of blue.

VII.—THYSONOTIS VIDUA. 9. Figs. 9, 10.

Exp. $1\frac{1}{2}$ inches.

Female. Upperside black, with narrow white fringes. Anterior wings with traces of metallic blue scaling at the base and along the subcostal nervure and its branches; and a white band, commencing narrowly rather before the middle of the inner margin, and extending upward beyond the cell; outwardly it expands nearly to the hind margin, curving round to a white spot just above the hinder angle, the space between this and the main portion of the white part of the wing being thickly dusted with black over the white. Posterior wings with a white oblique band, continuous with that on the fore wings, and continued to the base on the inner margin, the rest of the basal area being brown, and the outer part of the wing black.

Underside almost exactly like that of the female of *T. Drucei* (postea), except that in the anterior wings the curved outer part of the blue band is broader, and extends to the white portion of the wing; the black border is only continued beyond it, in dots at the end of the nervures.

Body blue above, with large black spots towards the extremity of the abdomen; antennæ black, spotted with white below; head black, orbits and palpi beneath blue; pectus black, white in the middle; abdomen white beneath.

Hab. Waigiou (Von Platen).

In the Collection of Dr. Staudinger.

Nearest to the typical female of T. Wallacei, Felder, according to the figure.

VIII.—THYSONOTIS DRUCEI. 6. Figs. 11, 12. 9. Fig. 13.

§ Thysonotis Peri, § H. Grose Smith, "Novitates Zoologicæ," I., p. 590 (July, 1894).

Exp. about $1\frac{1}{4}$ inches.

Male. Upperside much like T. Regalis, but of a rather lighter blue, with the borders narrower, and on the posterior wings more sharply defined. On the anterior wings a faint trace of the white portion of the underside is visible; in T. Regalis this is hardly perceptible.

Underside with the same pattern as T. Regalis, but anterior wings with the whole of the lower and outer portion white, as far as the end of the cell, and beyond, below the discoidal nervule, in one direction, and as far as the narrow black border on the other. The blue subcostal band is broader and more uniform in breadth than in T. Regalis, when it narrows and curves round to between the two upper median nervules, where it reaches the white portion of the wing and ceases. Below this point the black border becomes linear. Within it, towards the hinder angle of the wing, is a black patch, not extending to the inner margin. Posterior wings as in T. Regalis, but the white band is extended along the costa to the tip. Space beyond the ocellated spots less black than the rest of the wing.

Body-markings nearly as in *T. Regalis*. The pectus is tufted, and the legs streaked with whitish.

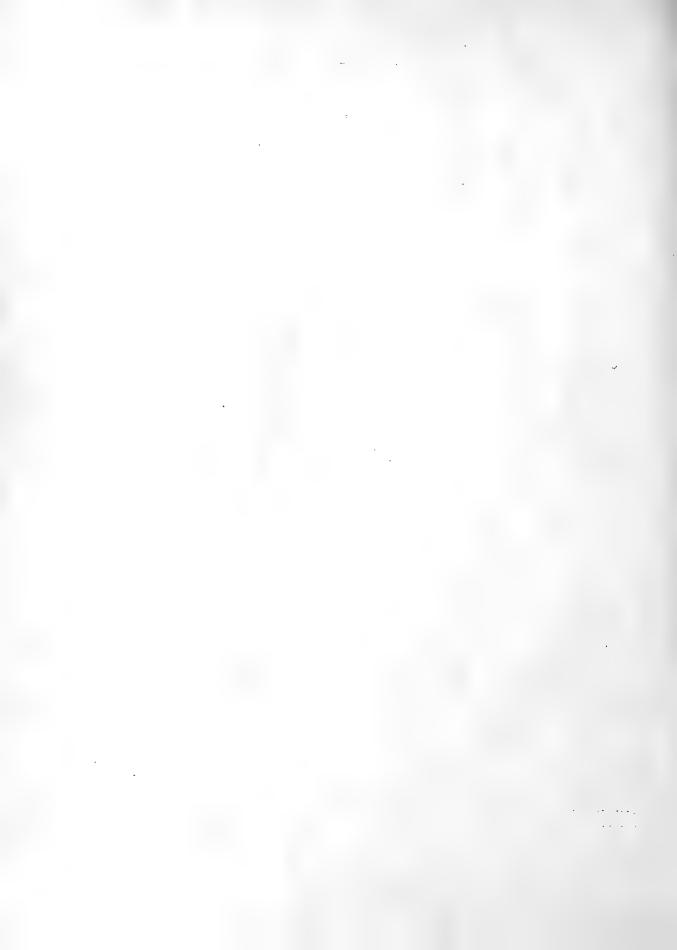
Female. Upperside brownish black. Anterior wings with a large white space, commencing at the base and extending along the inner margin for two-fifths of its length; upwards over the outer and lower part of the cell, and beyond, and outwards for three-quarters of the length of the wing. Posterior wings with the basal area white, stained inwardly and outwardly with bluish, the white colouring extending narrowly along the inner margin towards the anal angle; fringes narrowly white.

Underside and body-markings nearly as in the male; on the anterior wings the blue band is somewhat narrower on its basal portion, and the black patch towards the hinder angle is wanting. The thorax is of a paler blue above.

Hab. Ati On, New Guinea (Kubary).

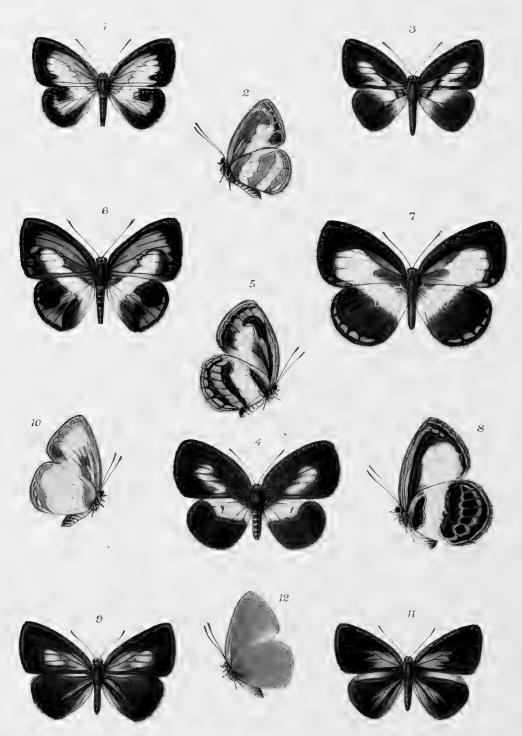
The male is in the Collection of Dr. Staudinger, and the female in that of Mr. Rothschild.

Allied to T. Wallacei, Felder, but the male has less indication of white colour on the anterior wings above, and in the female the white patch on the anterior wing above is larger, and on the posterior wing is narrower; the white cilia of both wings are narrower and less conspicuous.





ORIENTAL LYCZENIDZE, WI.



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LYCÆNIDÆ (ORIENTAL).

PLATE VI.

GENUS WAIGEUM.—I.

Waigeum, Staudinger, "Deutsche Entomologische Zeitschrift: 'Iris' (Dresden)," VIII., p. 154 (1895).

Anterior wings with the first subcostal nervule entirely separated from the costal nervure, and the fourth subcostal nervule emitted much higher up the third than in typical *Thysonotis*, and consequently much shorter. Anterior wings triangular, especially in the male, and pointed at the tips, instead of rounded; posterior wings more rounded than in *Thysonotis*. Palpi very short; legs short and thick; hind tarsi scarcely as long as the tibiæ. Antennæ half as long as the anterior wings, with a long fusiform club.

On the underside of all the wings, the metallic subcostal bar is usually double, being divided longitudinally by a broad dark band.

I.—WAIGEUM THAUMA. &. Figs. 1, 2. q. Fig. 3.

Waigeum Thauma, Staudinger, "Deutsche Entomologische Zeitschrift: 'Iris' (Dresden)," VIII., p. 154 (1895).

Exp. $1\frac{1}{2}-1\frac{3}{4}$ inches.

VOL. II., JANUARY, 1896.

Male. Upperside with the costal area of the anterior wings, and the hind margins of all the wings broadly black; the basal and central portions bright blue, changing into purple in certain lights, and mixed with a few green scales; anterior wings with an oblique white band on the disc, extending from the upper median nervule to a little below the submedian nervure, the inner margin being narrowly edged with blue. It is continued on the posterior wings, where

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II.—WAIGEUM SUBCÆRULEUM. Q. Figs. 4, 5.

Exp. $1\frac{3}{4}$ inches.

Female. Upperside brown, with grey fringes, and the base with some scattered blue scales. A common white band runs from above the upper median nervule of the anterior wings, and curves inwards to the base of the inner margin on the posterior wings; near its outer edge is a conspicuous oval discoidal spot.

Underside black, the hind margins, the costa, and the base of the inner margin of the anterior wings brown. Anterior wings with a broad blue subcostal band, slightly divided by the nervures, looped downwards at the end as far as the lowest median nervule, and retracted through the middle of the cell. A submarginal row of oblong spots, excavated and filled up on the inner side with black blotches; the nervures between being brown. A white band commences within the loop below the uppermost median nervule, and extends across the disc to the inner margin, where it is broadest. A transverse white band crosses the posterior wings; a blue band surrounds the basal black portion, and the white band is narrowly edged outside with blue, which curves outwards just below the costa. The outer half of the posterior wings is black, crossed by two broad bands of blue, the outermost of which is the narrower, and is split up into lunules gradually increasing in size to the anal angle; the nervures crossing the inner of the two bands are mostly whitish.

Body brown, antennæ black; brown below, narrowly ringed with white above; orbits blue in front, and white behind; abdomen banded with white; back of pectus, and abdomen beneath, white in the middle.

Hab. Waigiou (Von Platen).

In the Collection of Dr. Staudinger.

III.—WAIGEUM RIBBEI. A. FIG. 6. 9. FIGS. 7, 8.

Plebeius Ribbei, Röber, "Correspondenzblatt des Entomologischen Vereins, 'Iris' zu Dresden," I., p. 52, pl. iv., fig. 2 (March, 1866).

Waigeum Ribbei, Staudinger, "Deutsche Entomologische Zeitschrift: 'Iris' (Dresden)," VIII., p. 157 (1895).

Exp. $1\frac{2}{3}$ $-1\frac{3}{4}$ inches.

Male. Anterior wings with the costa, apex and hind margin black; the

rest of the wing bright blue, with a white band on the disc, extending from above the middle median nervule to the submedian nervure, the inner margin being narrowly blue. Posterior wings with the base black, dusted with blue, followed by an oblique white band. The whole of the wing beyond the cell, except the fringes (which are white on all the wings, more or less marked with black on the nervures, especially on the anterior wings) is black, except an irregular blue patch, rising about the forks of the median nervure, somewhat irregular and contracted in the middle, and widest before the hind margin, which it does not reach.

Underside. Anterior wings black, shading into brown at the borders, with a very large white patch covering the whole of the disc as high as the upper median nervule, except at the base, and towards the hind margin. There is a broad subcostal metallic blue band, curving down at the end nearly to the level of the upper median nervule, and a submarginal row of long blue spots between the nervures. Posterior wings with the basal space black, bordered above and below with metallic blue; then follows a broad oblique white band, and the outer part of the wing is black, with a submarginal row of long blue spots, separated by the nervures. Across the middle of the black space runs a row of oval black spots, bordered before and behind with blue, and separated by whitish nervures, slightly spangled with blue; on the outside runs a similar line. The last black, blue-bordered spot on the inner margin throws off a blue curve just below the limit of the black colouring of the wing.

Body black, with a white collar; antennæ ringed with white, and tipped with rufous; orbits blue; legs spotted with white; abdomen ringed with white, and white below.

Female. Upperside. Anterior wings black, the base, cell, and inner margin dusted with blue; a large white space on the disc, from beyond the cell almost to the inner margin. Posterior wings black, with an oblique white band, the basal area, and the base of the median nervules dusted with blue, and a row of blue submarginal markings between the nervures gradually widening to the anal angle.

Underside as in the male.

Hab. Sekar, N.W. New Guinea; and Ati On (Kubary).

In the Collections of Drs. Röber and Staudinger, the Hon. W. Rothschild, and Mr. H. Grose Smith.

This fine insect has more resemblance than the others here figured to the typical species of Thy sonot is.

IV.—WAIGEUM SIMPLEX. Q. Figs. 9, 10.

Exp. $1\frac{1}{2}$ inches.

Female. Upperside blackish-brown; anterior wings blue in and below the cell from the subcostal to the submedian nervures, and a short and incomplete oblique white band beyond. Posterior wings with the base, and the course of the median nervure to beyond the forks fleeked with blue; and with white bands on the middle of the costa, and on the basal half of the inner margin; an indistinct dark discal streak at the end of the cell.

Underside white, with the base, hind margins, and the costa of the anterior wings rufous-brown. Anterior wings with a short white subcostal streak, below which the cell is bordered with metallic blue above, and much more broadly below; there is also a submarginal row of oblong black spots filled up with blue on the rufous-brown hind margin. Within the lowest, a browner cone extends deeper into the disc than the other part of the border. Posterior wings white, the basal area and a narrow marginal band rufous. Basal area crossed by a curved grey streak, and bordered outside with some blue flecks. Border with a row of long blue spots between the nervures, narrowly edged outside with black; those nearest the anal angle becoming æneous.

Body black, orbits blue, club of antennæ rufous beneath, pectus and abdomen white beneath, the latter ringed with white above.

Hab. Waigiou (Von Platen).

In the Collection of Dr. O. Staudinger.

V.—WAIGEUM MIRACULUM. &. Figs. 11, 12.

Thysonotis (!) Miraculum, H. H. Druce, "Proceedings of the Zoological Society of London," 1893, p. 552, pl. 46, fig. 12.

Waigeum Miraculum, Staudinger, "Deutsche Entomologische Zeitschrift: 'Iris' (Dresden)," VIII., p. 153 (1895).

Exp. $1\frac{1}{4}$ - $1\frac{1}{2}$ inches.

Male. Upperside blackish-brown. Anterior wings blue on the lower half of the cell, and on the basal portion of the wing. Posterior wings whitish on the costa and inner margin, and dusted with blue along the course of the median nervure and its branches, nearly to the hind margin.

Underside yellowish-brown, both wings with a row of blue submarginal vol. 11., january, 1896.

streaks slightly edged with black, between the nervures, and an inner row towards the upper half of the wings. Anterior wings with a narrow greenish-blue line bordering the subcostal nervure beneath, in the cell, and a pinkish-white stripe on the inner margin, with one or two less distinct ones between the nervures above it.

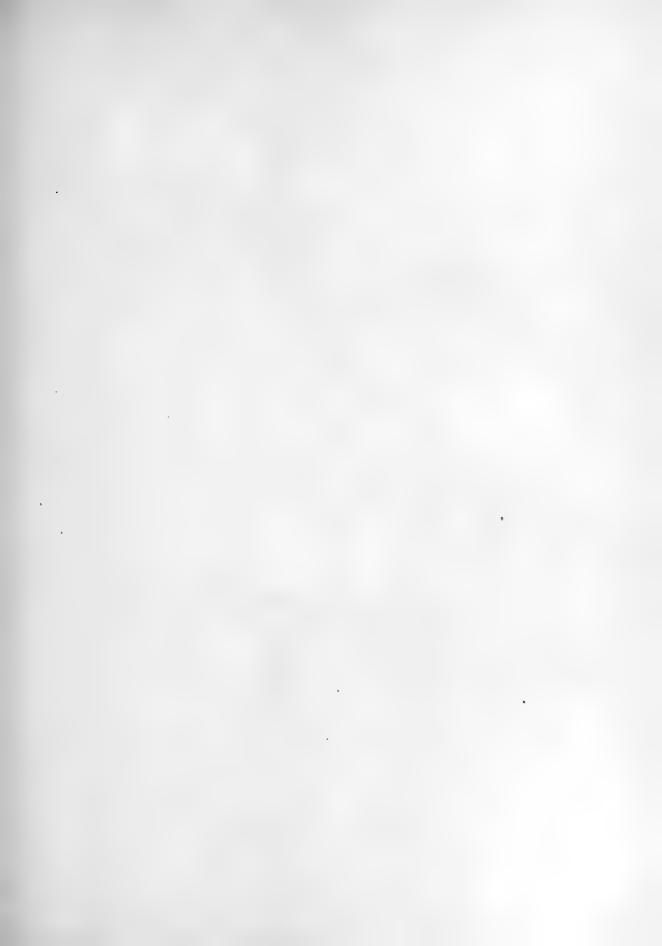
Body dark brown, mostly white below; orbits blue; abdomen ringed with white.

The Female, as figured by Mr. H. H. Druce, is dark brown, with pinkishwhite marks at the end of the cell of the posterior wings above, and towards the inner margin of the anterior wings beneath. There is a subcostal bluishgreen stripe on the anterior wings, and a row of submarginal metallic spots on all the wings.

Hab. Waigiou (Von Platen).

In the Collections of Dr. O. Staudinger and Mr. H. Grose Smith.

This species must be regarded as the type of the genus Waigeum, the principal characters of which were indicated by Mr. H. H. Druce, though he would not name the genus, which was then known by a single female specimen only.



ORIENTAL LYCZENIDE.VII.



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ELO MICTUS ARMANUS IN CONTRACTO HAMAL AFILI

TO A SMARAGETS ₹

FAITNIN D. SMARAGETS ₹

NATUO ₹

LYCÆNIDÆ (ORIENTAL).

PLATE VII.

THYSONOTIS. III.

IX.—THYSONOTIS ARYANUS. &. Figs. 1, 2. Q. Figs. 3, 4.

Thysonotis Aryanus, H. Grose Smith, "Novitates Zoologica," II., p. 512 (December, 1895).

Exp. δ $1\frac{1}{8}$ inches; 2 $1\frac{1}{16}$ inches.

Male. Upperside resembles T. Hymetus, Feld., but rather darker violaceous, with the black marginal band on both wings wider than in that species, but narrower than in T. Piepersi, Snell.

Underside. Both wings with much broader marginal black bands than in either of those species. On the anterior wings the greenish-blue subcostal band extends from the base to beyond the middle. On the posterior wings the black lunules in the submarginal blue band are broader and indented on their outer edges instead of being straight, as in *T. Hymetus*; the basal black bar is broader, and margined with blue only at the base and along the costa for a short distance.

Female. Upperside differs from that sex of T. Hymetus and T. Piepersi in the pale area being much more restricted, not extending on the anterior wings beyond the lower end of the cell, and on the posterior wings being only faintly represented by a rather pale space crossing the wings before the middle.

On the underside the pale area is represented by a rather broad white band, which, however, is very much narrower than in the females of either T. Hymetus or T. Piepersi.

Hab. Batchian, Ternate, and Halmaheira.

In the Collections of the Hon. W. Rothschild and H. Grose Smith.

The wings are of the same shape as in T. Piepersi, and rather more elongate than in T. Hymetus.

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The specimens figured were taken by Mr. Doherty in Batchian in March, 1892. vol. II., APRIL, 1896.

X.—THYSONOTIS PLATENI. &. Figs. 5, 6.

Exp. $1\frac{3}{8}$ inches.

Male. Upperside violet-blue, with moderately narrow black borders and black cilia, except at the apex of the anterior wings, where they are white. Posterior wings with the white band of the underside showing faintly through; and the basal half of the inner margin white.

Underside black, with a broad white bar running from the inner margin of the posterior wings obliquely to above the second discoidal nervule of the anterior wings. Anterior wings with a broad blue band running from the base for three-quarters of the length over the upper half of the cell and beyond it. The white band is excavated on its outer edge below; and indented on its upper edge, before its extremity. Posterior wings with an oblique blue bar over the black basal part of the wing; and the broad black border with a row of six conical blue spots, commencing at the anal angle, containing large black spots; towards the apex is a trace of another blue spot, and outside them is a row of narrow white streaks. Cilia dark grey, whitish on the upper half of the anterior wings.

Body black, bluish-white beneath, face with a rather broad blue stripe within each eye, thorax clothed with bluish hair, abdomen with bluish-white incisions.

Hab. Waigiou (Von Platen).

In the Collection of Dr. Staudinger.

Allied to T. Cælius, Feld.

XI.—THYSONOTIS HAMILCAR. &. Fig. 7. 9. Fig. 8.

Thysonotis Hamilear, H. Grose Smith, "Annals and Magazine of Natural History," ser. 6, vol. 14, p. 25 (July, 1894).

Exp. $1\frac{3}{8}-1\frac{1}{4}$ inches.

Male. Upperside lilac-blue, with narrow black borders and fringes; the white band of the underside indistinctly showing through, especially on the posterior wings, which have a white band on the outer half of the costa, and a slender tail at the end of the lowest median nervule.

Underside. Anterior wings white, with the costa and hind margin rather broadly black, most broadly towards the hinder angle, where it is intersected by an obsolete whitish line. Posterior wings white, with a broad oblique black band running from the base of the inner margin to below the subcostal nervure;

the costal area has a pale blue patch at the base, bordered inside with black; and there are some blue scales on the lower side of the black bar near the base. Otherwise the posterior wings are coloured as in the female, but the blue markings are rather less extensive.

Female. Upperside closely resembles that of the same sex of T. Cyanca, Cramer, but on the anterior wings the white area is less sharply angulated at its apex, and the outer margin is rather more broadly greyish-black; on the posterior wings along the costal margin is a broad greyish-black band, which extends from the base two-thirds along the wings towards the apex; the blue band of lunules across the disc towards the outer margin is broader and brighter. On both wings at the base are patches of pale blue scales.

On the underside the double white lines, which intersect the greyish-black outer-marginal band on the anterior wings, are less distinct, especially the outer line, and they do not extend so far towards the apex. On the posterior wings the dark band along the costa is, as on the upperside, broader and longer than in *T. Cyanca*; the dark outer-marginal band is broader, and the black spots in the row of blue ocelli before the margin are smaller.

Hab. New Britain, New Ireland.

In the Collection of Mr. H. Grose Smith.

Tailed like T. Cyanea, Cram., to which it is allied.

The type (a female) was taken by Captain Webster in New Britain in 1894; both sexes were subsequently received from New Ireland.

XII.—THYSONOTIS SMARAGDUS. 9. Figs. 9, 10.

Thysonotis Smaragdus, H. H. Druce and G. T. Bethune-Baker, "Proceedings of the Zoological Society of London," 1893, p. 550, pl. 46, fig. 5.

Exp. $1\frac{3}{8}$ inches.

Female. Upperside white, with very broad black borders, the base bluish within the white portion of the wing, the lower half of the border on the outer margin of the anterior wings is intersected by a bluish-white line; the border of the posterior wings has an inner row of pale blue lunules, and an outer row of narrow white streaks; a short obtuse tail at the end of the lowest median nervule.

Underside white, anterior wings with the costal area and outer margin broadly brownish-black, the latter intersected by two white lines, divided by the nervures. Posterior wings with a short oblique black bar running from the

base, marked with pale blue at its base above; the outer third deep black, with a row of six blue oval spots, separated by the nervures, and enclosing oval black spots, running from the anal angle; towards the apex is a pale blue crescent; outside them is a white line, divided into streaks by the nervures; fringes grey.

Body black above, clothed with pale blue hair; white below. Orbits pale blue; incisions of the abdomen white.

Hab. Wetter Island; Amboyna (Doherty).

In the Collections of the Hon. Walter Rothschild and of Mr. H. Grose Smith.

The male was taken by Mr. Doherty in Wetter Island; and the female, now first described and figured, was taken by him in Amboyna, in February.

XIII.—THYSONOTIS MANTO. Q. Figs. 11, 12.

Exp. 11 inches.

Female. Upperside black, with greenish-blue scales towards the base; anterior wings with an irregular longitudinal white band running from the base above the submedian nervure, and along both sides of the median nervure for four-fifths of the length of the wing; towards the outer angle there are traces of a pale submarginal blue line. Posterior wings entirely crossed before the middle by a narrow white band, broadest on the costa and inner margin, and with a submarginal row of nearly-connected blue lunules towards the anal angle. A slender linear tail at the end of the lowest median nervule.

Underside. Anterior wings black, with the white band more sharply defined, and extending to the inner margin; the lower part of the outer margin intersected by two white lines, the outermost rather indistinct. Posterior wings black, the costal area (except at the extreme base) and a transverse band, white; submarginal black, blue-bordered spots oval, very large; beyond them is a white line broken into streaks by the nervures.

Body black above, white beneath; orbits, and incisions of abdomen, whitish; thorax clothed with blue hair.

Hab. Kerekadi, Astrolabe Bay, British New Guinea.

In the Collections of Mr. Grose Smith, and of Dr. Staudinger, from Constantinhafen (Grubauer).



OF THE MILE IN A LANGE OF STREET, IV.



LYCÆNIDÆ (ORIENTAL).

PLATE VIII.

THYSONOTIS. IV.

XIV.—THYSONOTIS STEPHANI. Q. Figs. 1, 2.

Exp. nearly 1½ inches.

Female. Upperside greyish-black, scaled with pale metallic green at the base. Anterior wings white between the middle of the cell and the submedian nervure; this white space is narrowed outwardly, extending towards the hind margin between the two upper submedian nervules; below this point are traces of submarginal bluish-white lunules, two above the submedian nervure being most distinct. Posterior wings crossed by a rather narrow white band near the base, and with a long tail, bordered with white, at the end of the lowest median nervule. Fringes greyish-black margined with white.

Underside greyish-black; anterior wings with the white space more sharply defined, and with two white submarginal lines on its lower half, the innermost broadest. Posterior wings with the costal area narrowly white, and a white band near the base running from the inner margin to the upper subcostal nervule; a submarginal row of large oval black spots, surrounded with blue scaling, and separated by the nervures, outside which is a submarginal white line; the fringes as on the upperside.

Hab. Stephansort, New Guinea.

Allied to T. Sperchius, Felder, and T. Manto, Smith and Kirby. In the Collection of Mr. Grose Smith (Captain Cayley Webster).

XV.—THYSONOTIS HANNO. 8. Figs. 3, 4.

Thysonotis Hanno, H. Grose Smith, "Annals and Magazine of Natural History," ser. 6, vol. 14, p. 25 (July, 1894).

Exp. 11 inches.

Male. Upperside similar to that of T. Hymetus, Felder, but both wings more violet-blue, with the outer margins more narrowly black.

Underside with the costal and outer margins of the anterior wings and the outer margin of the posterior wings brighter black; on the anterior wings the black band along the costa, on its lower margin, has a short black spur at the end of the cell and a longitudinal excrescence a little before the apex, and the basal blue streak above the cell extends further along the wings; on the posterior wings the subbasal blue streak does not extend along the inner margin, the metallic-blue rings round the submarginal row of black spots are less clearly defined, and the black area above them is less irregular on its inner edge.

Hab. New Britain (Captain Cayley Webster).

In the Collection of Mr. H. Grose Smith.

One specimen only was in the Collection; it is a tailless species.

XVI.—THYSONOTIS PLOTINUS. &. Figs. 5, 6. g. Fig. 7.

Exp. $1\frac{1}{3}$ inches.

Male. Upperside lilac-blue, with narrow black borders.

Underside black; anterior wings with a broad white band starting from the inner margin near the base, where it is narrowest, and running obliquely upwards as far as the lowest discoidal nervule; a rather broad metallic-blue band running from the base along the subcostal nervure for about three-quarters of the length of the wing. The upper edge of the white band is marked near its outer angle with a black spot connected with the black portion of the wing above. Posterior wings with a curved metallic-blue band on the black at the base, and with a submarginal row of oval black spots, separated from the rest of the black border by the metallic blue surrounding them. Towards the apex of the wing this band of black spots surrounded with blue narrows almost to a point. The wings are crossed before the middle by a broad white band, which is narrowest on the inner margin.

Female. Upperside black; base with some scattered blue scales; and traversed by a white band placed as on the underside of the male, but narrower, and with its upper edge on the anterior wings entire.

Underside as in the male; the black spot on the anterior wings is more distinct than on the male.

The species is tailless, but the posterior wings of the female are slightly sinuated towards the anal angle. Fringes black, whitish on the upper half of the anterior wings in both sexes; thorax clothed with bluish or greenish hair.

Hab. Stephansort, New Guinea (Captain Cayley Webster).

In the Collection of Mr. H. Grose Smith. Allied to T. Plateni, Smith and Kirby.

XVII.—THYSONOTIS ESME. &. Figs. 8, 9.

Thysonotis Esme, H. Grose Smith, "Annals and Magazine of Natural History" ser. 6, vol. 13, p. 501 (June, 1894).

Exp. $1\frac{3}{8}$ inches.

Male. Upperside resembles T. Cepheis, Druce.

Underside. Both wings more cinereous-grey, with the pale spaces on them more cinereous-white. On the anterior wings the pale space does not extend so far over the disk towards the outer margin. On the posterior wings the metallic colouring at the base of both wings and in the discal band across the posterior wings is more bluish and less golden-green, while the black velvety spots in the band are more extended inwardly; the outer edge of the band is further from the outer margin and more convex between the veins. Both wings are broader and more rounded at the apex.

Hab. New Britain (Webster, 1894).

In the Collection of Mr. H. Grose Smith, described from a single specimen.

THYSONOTIS SNELLENI. &. Figs. 10, 11. Q. Fig. 12.

On further consideration we think that the specimens figured under this name are hardly distinct from *T. Aryanus*, Grose Smith, figured by us on our last plate of *Thysonotis* (Oriental Lycanidae VII. Thysonotis III., figures 1 & ., 3, 4 & .

We regret to find that by an error in lettering the last plate, fig. 2, which represents the underside of T. Hamilton, has been referred to as the underside of T. Aryanus \mathfrak{F} . We therefore propose to withdraw the name T. Snelleni (as a synonym of T. Aryanus), and to make the following corrections:—

On Plate of Oriental Lycanida VII., lege

Fig. 1. Thysonotis Aryanus, &.

Figs. 8, 2. Thysonotis Hamiltar, ?.

There should be a corresponding correction of the letterpress.

On Plate of Oriental Lycænidæ VIII., lege

Figs. 10, 11. Thysonotis Aryanus, &.

Fig. 12. Thysonotis Aryanus, 2.

XVIII.—THYSONOTIS CÆSIUS. &. Figs. 13, 14. g. Fig. 15.

Thysonotis Casius, H. Grose Smith, "Novitates Zoologica," Vol. I., p. 576 (July, 1894).

Exp. $1\frac{1}{3}-1\frac{1}{4}$ inches.

Male. Upperside purplish-blue, with the costa of the anterior wings narrowly black; the hind margin more broadly, and the hind and inner margin of the posterior wings more broadly still, bordered with black; fringes narrowly white.

Underside. Anterior wings greyish-brown, darkest at the base, where a metallic-green stripe runs above the costal nervure; the cell and the whole of the disk beneath, and beyond nearly to the inner margin, is yellowish-white. Posterior wings darker greyish-brown, the costa narrowly white, a broad metallic golden-green subcostal band at the base, and an oblique band beyond, white on its upper, and metallic golden-green on its lower half. The submarginal black spots are situate in a broad metallic golden-green band, outwardly convex between the veins, the black spot between the lowest submedian nervule and the submedian nervure being almost bifid.

Female. Upperside brownish-black, with narrow whitish fringes. A creamy-white band runs from the base of the anterior wings along the median nervure and its branches for three-quarters of the length of the wing.

Underside as in the male, except that the submarginal row of black spots on the posterior wings are larger.

Hab. Humboldt Bay, New Guinea (Sept.-Oct., 1892, Doherty); Stephansort, New Guinea (Captain Cayley Webster, 1894).

In the Collections of the Honourable Walter Rothschild and of Mr. H. Grose Smith.

Allied to *T. Cepheis*, Druce, but the male is larger, with broader and more rounded wings, and the outer margins more broadly black; on the undersurface the metallic colouring is more golden and extended. In the female the pale area on the anterior wings is narrower than in that species, and does not extend so far towards the outer margin.



ORTENTAL LYCAENIDAEIX



". . . "Fright relocation

1.2 HOLOCHILA TRINGA.J.

West, Newman imp

5.4 HOLGORIU A BUBROCEA, \$ 9,10.HOLOCHILA SUBARGENTEA, \$.

LYCÆNIDÆ (ORIENTAL).

PLATE IX.

HOLOCHILA. I.

I.—HOLOCHILA TRINGA. 6. Figs. 1, 2.

Holochila Tringa, H. Grose-Smith, "Novitates Zoologicæ," I., p. 581 (July, 1894).

Exp. $1\frac{3}{8}$ inches.

Male. Upperside bright blue, with the outer margins greyish-black, the inner margin of the posterior wings broadly grey. The anterior wings are somewhat violaceous.

Underside silvery white. Anterior wings with two grey lines across the disc from a little below the costal margin, towards the apex, to a little above the submedian nervure, where the lines converge, and almost join. Posterior wings with two rows of irregular grey lines across the disc, and a transverse row of grey lines nearer the base, commencing below the costal nervure and crossing the cell about its middle, beneath which are two or three grey spots; on the outer margin between the veins is a series of black dots.

Hab. Humbolt Bay, Dutch New Guinea (Sept.-Oct., 1892), (Doherty).

In the Collections of Mr. H. Grose-Smith and the Hon. W. Rothschild. Five males were obtained.

II.—HOLOCHILA SUBROSEA. 8. Figs. 3, 4. 9. Fig. 5.

Holochila Subrosea, H. Grose-Smith, "Novitates Zoologica," I., p. 580 (July, 1894).

Exp. δ $1\frac{1}{4}$; ϱ $1\frac{3}{8}$ inches.

Male. Upperside paler slaty-blue than in H. Silicea (infra), but somewhat tinged with pink.

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Underside brownish-white, both wings with the discs crossed by a narrow grey line before the middle, between which and the outer margin is situate a row of narrow grey lunules between the veins, each lunule with a grey dot below it on the outer margin.

Female. Like the male, but the costal and outer margins are very broadly dark grey.

In both sexes the outline of the posterior wings between the median nervules is squarer than in any of the other described species.

Hab. Humboldt Bay, Dutch New Guinea (Sept.-Oct., 1892), (Doherty).

Four males and three females received. In the Collections of the Hon. W. Rothschild and Mr. H. Grose-Smith.

III.—HOLOCHILA SILICEA. 8. Figs. 6, 7. 9. Fig. 8.

Holochila Silicea, H. Grose-Smith, "Novitates Zoologicæ," I., p. 580 (July, 1894).

Exp. $1\frac{3}{4}$ inches.

Male. Upperside dull slate-colour, very slightly tinged with bluish-green in certain lights; rather less opaque than H. Absimilis, Felder.

Underside greyish-white. Anterior wings with a grey streak at the end of the cell, and two rows of grey lines across the disc, the inner row curving inwardly at its upper end, the outer row being submarginal and following the contour of the outer margin. Posterior wings with two rows of grey markings across the disc, the outer row being lunulate; two vertical lines and a round spot below the costal nervure at equal distances; two similar lines, one across the middle, the other at the end of the cell with two spots on either side of the former, a row of three spots between the veins below the median nervure, and a row of spots between the veins on the margin.

Female. Upperside darker than the male but paler than the female of H. Absimilis, with a dusky bluish-grey patch in the middle of the anterior wings, and a very slight indication of a pale patch between the subcostal nervures on the posterior wings towards the apex. Underside as in the male.

Hab. Biak (Doherty).

In the Collections of Mr. H. Grose-Smith and the Hon. W. Rothschild. Two males and three females were received.

IV.—HOLOCHILA SUBARGENTEA. &. Figs. 9, 10.

Exp. 13 inches.

Male. Upperside silvery pale azure-blue or purplish-blue in different lights, with narrow black margins, sinuated on the anterior wings; fringes white; costal and inner margin of posterior wings whitish.

Underside silvery-white, with a slight pinkish lustre, a row of indistinct linear markings crosses both wings beyond the middle: posterior wings with a black dot below the submedian nervure before the first fork, and with four more distinct black dots on the margin between the nervures, that nearest the anal angle linear. There are indications of a row of submarginal lunules crowning the black dots.

Hab. Cape York, North Australia.

In the Collection of Dr. Staudinger. From the Collection of Freiherr von Schenck.

V.—HOLOCHILA CUPREA. 6. Figs. 11, 12. 2. Fig. 13.

Plebeius Dimorphus, var. Cupreus, Röber, "Correspondenz-Blatt des Entomologischen Vereins, 'Iris,' zu Dresden," I., p. 62 (1884).

Male. Upperside cupreous-brown, with the marginal line and fringes black; anterior wings, with the fourth subcostal nervule, the discoidal and median nervules, and the submedian nervure broadly incrassated with purplish, except towards their extremities.

Underside pearly-white. Anterior wings crossed by a row of indistinct linear markings. Posterior wings with three small black dots arranged in a triangle towards the base (which are in some specimens obsolete), two above and one just below the median nervure; two zigzag and interrupted submarginal lines towards the lower half of the wing, and five small black dots between the nervures on the lower half of the wing, the two nearest the anal angle being imperfectly separated, and placed above the submedian nervure.

Female. Upperside. Both wings greyish-black. Anterior wings with an oval white patch extending from before the fork of the median nervure, over and on both sides of the median nervules for half their length; between this point and the base, the wing is dusted with pale blue. Posterior wings with a

white band, increasing in width, commencing on the costa just before the apex, and curving to the middle of the cell; the inner margin is also white.

Underside as in the male, but there are six rather larger black submarginal dots instead of five, that nearest the anal angle dentated inwardly.

Hab. North-west New Guinea (Sekar), (Röber); Ati On, New Guinea (Kubary).

In the Collections of the Honourable Walter Rothshild, Dr. Staudinger, and Mr. H. Grese-Smith.

Röber considered this insect to be a local form of the following; and he also ("Iris," I., p. 62, pl. iv., figs, 27, 28) described and figured a third form from Aru, under the name of "Plebeius Dimorphus, var. Cæruleus."

VI.—HOLOCHILA DIMORPHA. 6. Figs. 14, 15.

Plebeius Dimorphus, Röber, "Correspondenz-Blatt des Entomologischen Vereins, 'Iris,' zu Dresden," I., p. 62 (1884.)

Male. Upperside. Azure-blue, with moderately broad black borders, the tips of the fringes, and the costa of the posterior wings white, the nervures on the anterior wings incrassated as in H. Cuprea, but concolorous with the rest of the wing.

Underside pearly-white, with a black line at the base of the fringes. Anterior wings with two rows of brown linear submarginal dashes on their lower half. Posterior wings as in *H. Cuprea*, but with six larger submarginal black dots, the long spot above the submedian nervure being followed by a round one below it, of which there is no trace in *H. Cuprea*.

Hab. Eastern New Guinea (Röber); Stephansort, German New Guinea (Webster, 1894).

In the Collections of the Honourable Walter Rothschild, Mr. H. Grose-Smith, and others. This and the preceding insects are allied to *H. Absimilis*, Felder.



ORMENTAL LYCZENIDZE, X. HOLOCHILA, II.



Horace Knight del et lith

West.Newman 1mp

1.2.H	OLOCHI	LA REFUSA	♂.	8,9.H	OLOCHII	AL	INTENSA	18.
3.	* 11	>>	2	10.	11		3)	9
4,5.	17	HARTERTI	8	11,12.	11	PU	RPUREA	13
6.	32	REGINA	8	13.	11	Ε	BUTLERI	· 6
77.	17	11	9	1475.	13	F	ULGENS	38

LYCÆNIDÆ (ORIENTAL).

PLATE X.

HOLOCHILA. II.

VII.—HOLOCHILA REFUSA. 8. Figs. 1, 2. 9. Fig. 3.

Holochila Refusa, H. Grose-Smith, "Novitates Zoologicæ," I., p. 580 (July, 1894).

Exp. $\frac{7}{8}$ inch.

Male. Upperside. Both wings greyish-brown, with a white patch which covers the middle of the disc, and thence extends to the inner margin on the anterior wings, and the upper and middle portion of the posterior wings, slightly invading the cells of both wings, shading into dull blue—slightly opalescent in certain lights—towards the base. Cilia white, broadly brown at the tips of the veins.

Underside. Both wings greyish-white, with the costal margin narrowly, the apex broadly, and outer margin brownish-grey, the outer-marginal grey band gradually narrowing to the outer angle. On the posterior wings is a similar outer-marginal band, broadest at the apex. Cilia of both wings brown, narrowly marked with white between the veins.

Female similar, but with the blue colouring towards the base almost obsolete.

Antennæ black, narrowly ringed with white; club deep black throughout; legs broadly banded with black and white.

Hab. Humboldt Bay, Dutch New Guinea (Doherty, Sept.-Oct., 1892). In the Collection of the Hon. W. Rothschild.

VIII.—HOLOCHILA HARTERTI. &. Figs. 4, 5.

Holochila Harterti, H. Grose-Smith, "Novitates Zoologica," I., p. 579 (July, 1894).

VOL. II., JANUARY, 1897.

Exp. $1\frac{1}{5}$ inch.

Male. Upperside. Both wings brownish-grey, with a white patch which covers a triangular space on the anterior wings; its rounded apex commences near the end of the cell, and has its base on the middle of the inner margin. Posterior wings with a large white patch extending from the costal margin, from the apex nearly to the base, and thence across the wings, invading the middle of the cell to the upper median nervule, whence it shades into the browngrey area of the lower portion of the wings.

Underside. Slightly shaded with brown towards the outer margins. Cilia white on the anterior wings and mottled with grey at the tips of the veins on the posterior wings.

Antennæ white, very narrowly ringed with black; club rufous beneath. Legs white; knees, tibiæ and tarsi broadly ringed with black.

Hab. Humboldt Bay, Dutch New Guinea (Doherty, Sept.-Oct., 1892).

In the Collection of the Hon. W. Rothschild.

IX.—HOLOCHILA REGINA. 8. Fig. 6. 9. Fig. 7.

Holochila Regina, Butler, "Annals and Magazine of Natural History," ser. 5, vol. 10, p. 150 (August, 1882).

Exp. $1\frac{1}{6}$ inches.

Male. Upperside. Brilliant cobalt-blue, with moderately broad black borders; fringes slightly marked with white.

Underside bluish-white, with a black line at the base of the fringes, which are spotted with black. Anterior wings with a black mark at the lower angle of the cell, and posterior wings with a round black spot opposite the inner margin, before the middle.

Female. Upperside brown. Anterior wings with a white patch, shot with silvery-blue, extending between the median and submedian nervures from the base below and beyond the cell to two-thirds of the length of the wing.

Antennæ black, narrowly ringed with white; club mostly rufous in the male, and black in the female; legs broadly ringed with black and white.

Hab. Duke-of-York-Island (types) and New Guinea.

In the Collections of the British Museum (Natural History), and of Mr. H. Grose-Smith.

X.—HOLOCHILA INTENSA. &. Figs. 8, 9. Q. Fig. 10.

Holochila Intensa, Butler, "Annals and Magazine of Natural History," ser. 4, vol. 18, p. 245 (Sept., 1876).

Exp. $1\frac{1}{6}$ inch.

Male. Upperside rich cobalt-blue, with moderately broad black borders, except on the inner margin of the anterior wings; fringes white, with black spots on the nervures, most distinctly marked on the posterior wings.

Underside snow-white, with a round black spot opposite the inner margin of the posterior wings before the middle. A black line at the base of the fringes, followed by black spots on the fringes at the extremities of the nervures.

Antennæ black, narrowly ringed with white; club rufous at the tip and beneath; legs white, tibiæ and tarsi ringed with black.

Female. Upperside brown. Anterior wings with a large pale patch, which is pale silvery-blue in the lower part of the cell, and below it, and white between the median nervules for half their length beyond the cell.

Hab. Aru.

In the Collections of the British Museum (Natural History), and of Mr. H. Grose-Smith.

XI.—HOLOCHILA PURPUREA. &. Figs. 11, 12.

Exp. $1\frac{1}{6} - 1\frac{5}{12}$ inches.

Male. Upperside rosy-purple, with the base more suffused with purple, which extends along the principal nervures of the anterior wings. The nervules radiating from the cell are broadly bordered with black at their origin. Fringes white, spotted with brown on the nervures, and preceded by an ill-defined narrow brown border.

Underside grey, with two submarginal rows of blackish flecks on the anterior wings, and three on the posterior wings. A spot at the ends of the cells; and others towards the base of the posterior wings.

Hab. Sydney; Moreton Bay.

In the Collections of the British Museum (Natural History), and of Mr. H. Grose-Smith (type).

Resembles H. Heathi, Cox, on the upper surface, and H. Absimilis, Felder, beneath. It is strange that we have not been able to find a description or figure of such a well-marked Australian species.

XII.—HOLOCHILA BUTLERI. &. Fig. 13.

Exp. $1\frac{1}{6}$ inches.

Male. Upperside deep purplish-blue, with all the borders, except the inner margin of the anterior wings, black, including the apical third of the anterior wings; incisions white.

Underside white, with a marginal row of black dots, connected by a black line; a larger spot on the posterior wings towards the inner margin.

Antennæ black, narrowly ringed with white, and tipped with rufous; legs broadly ringed with black and white.

Hab. Halmaheira (Gilolo).

In the Collection of Dr. Staudinger.

Allied to H. Intensa, Butler, but larger, and of a deeper purplish-blue.

XIII.—HOLOCHILA FULGENS. 7 Figs. 14, 15.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Anterior wings subtriangular, longer than broad, the costa and hind margin nearly straight, the latter slightly oblique. Rich purple, with the costal and apical areas and the hind margin broadly black. Posterior wings brilliant purplish-blue, with the costa and inner margin broadly, and the hind margin narrowly, black.

Underside pearly white, with an oval black spot below the submedian nervure, at about half its length.

Hab. Amboina (Wallace).

In the Collections of Mr. H. Grose-Smith, and of the late Mr. Hewitson (Natural History Museum).

Differs from H. Butleri by the longer wings, and the different shades of blue.



OBLIENTAL LYCATMENAS, XI. PSEUDONOTIS, EPIMASTIDIA, LAMPIDES.



Horace Knight del et lith

. PSEUDONOTIS MILO :

3,4 ,, HUMBOLDTI &

" EPIMASTIDIA ALBOCŒRULEA!

SODALIS ?.

10,11.PSEUDONOTIS FLORINDA & 12,13. LAMPIDES ECLECTUS &

14 ALLECTUS & 15,16.

PARALECTUS 9. 17 .

LYCÆNIDÆ (ORIENTAL).

PLATE XI.

PSEUDONOTIS, EPIMASTIDIA, AND LAMPIDES.

GENUS PSEUDONOTIS.

Pseudonotis, H. H. Druce, "Annals and Magazine of Natural History," ser. 6, vol. 13, p. 252 (1894).

I.—PSEUDONOTIS MILO. 2. Figs. 1, 2.

Myrina Milo, H. Grose-Smith, "Annals and Magazine of Natural History," ser. 6, vol. 18, p. 155 (August, 1896).

Exp. $1\frac{1}{8}$ inch.

Female. Upperside. Both wings greyish-brown, crossed by a common central broad white band extending from the lower discoidal nervule of the anterior to the inner margin of the posterior wings, as in Ps. Danis, Felder, but the band is wider on the anterior wings, and on the posterior wings does not extend so far along the costal margin. On the posterior wings is a very narrow, well-defined, submarginal white line, extending nearly to the apex.

Underside with the white band as above, but on the anterior wings it extends nearer to the apex and costal margin, and in the dark marginal area there is a band of narrow blue lunules. On the posterior wings, in the dark marginal area, is a submarginal band of silvery azure-blue lunules, centred with black, those nearest the apex the smallest, gradually increasing in size to the submedian nervure; above the anal angle the lunule with its central spot is the smallest; above the two lunules nearest the anal angle are several silvery azure-blue spots and lines, crowned by a V-shaped black line, and another black line situated horizontally towards the inner margin. The posterior wings have two tails.

Head black, orbits white, antennæ narrowly ringed with white, and vol. 11., April, 1897.

with a white space beneath before the club; thorax and abdomen above bluishgrey; abdomen beneath white; legs black, ringed with white.

Hab. New Ireland.

In the Collection of Mr. H. Grose-Smith.

Described from a female specimen. There is a male from the same locality, but it is too much rubbed to permit of a satisfactory description; it does not appear, so far as can be seen, to differ from the female, except that the wings are less rounded and the white band on the anterior wings is more sharply angulated at its upper end.

Nearest to *Ps. Danis*, Felder, but differs from it in the absence of the lunules on the upperside of the posterior wings of that species, and on the underside in the deeper and brighter colouring of the lunules on the posterior wings, and otherwise as before mentioned. It is also a smaller species.

II.—PSEUDONOTIS HUMBOLDTI. &. Figs. 3, 4. 9. Fig. 5.

Pseudonotis Humboldti, H. H. Druce, "Annals and Magazine of Natural History," ser. 6, vol. 13, p. 252 (1894).

Exp. $\delta 1\frac{1}{2}$ **?** $1\frac{7}{10}$ inch.

Male. Upperside rich purplish-blue, with moderately broad black borders. Posterior wings with a large white patch on the costa before the apex, extending from the level of the fork of the subcostal nervure (the lower branch of which bounds it below) to half the distance between the fork and the extremity. On the border of the posterior wings is a row of pale blue arches, resting on straight or slightly curved bases, and filled up with black. The first and last are indistinct, and the last but one has a depression in the middle, thus forming a double arch above. Outside there are two rows of pale bluish-white streaks between the nervules, the last terminal. Inner margin pale bluish-grey; a long black white-tipped tail at the end of the lowest median nervule.

Underside white. Anterior wings with the hind margin rather broadly bordered with smoky-brown. There is a row of six submarginal spots of the ground-colour between the nervures, bordered with bluish-white outlines, nearly straight outwardly, and curved and zigzag inwardly; that nearest the hinder angle is double. Between these and the short grey fringes is a nearly continuous grey line. Posterior wings of a duller white than the anterior wings, and with a brown border everywhere as broad as in the latter at the apex. A submarginal row of whitish semicircular outlines between the nervures, specked towards the anal angle with blue, and filled up with brown, except the fifth, which is the largest, which is filled up with black; the sixth (that above the submedian nervure) is double, and consists of a contiguous cone and square.

Body dark brown above, white below. Antennæ narrowly ringed with white; thorax deep purple.

Female. Upperside. Black, with a broad central white band, crossing both wings, and bordered with pale blue, but not extending to the costa of the anterior wings. Marginal markings as in the male; but the submarginal cones on the posterior wings paler blue, and rather larger.

Underside as in the male, but the lunules larger and more distinct.

Hab. Humboldt Bay, North New Guinea (Doherty); Stephansort, German New Guinea (Webster).

In the Collections of Messrs. Godman and Salvin, Mr. Hamilton Druce, Mr. H. Grose-Smith, and others.

Allied to P. Ancharia, Hewitson, but with the costa of the anterior wings not bordered with brown beneath.

III.—PSEUDONOTIS FLORINDA. & Figs. 10, 11.

Pseudonotis Florinda, H. Grose-Smith, "Annals and Magazine of Natural History," ser. 6, vol. 18, p. 155 (August, 1896).

Exp. 15 inch.

Male. Upperside. Both wings rather dark shining blue, irrorated with black, and with broad black costal and outer margins, the veins crossing the blue area also brownish black; the outer edge of the blue area on the posterior wings is indented between the veins.

Underside. Both wings lighter brownish black, crossed from the upper discoidal nervule towards the apex by a common band of greyish-white; the band on the anterior wings is narrowest towards the apex, and gradually widens to the inner margin; the band on the posterior wings is of nearly uniform width, and extends over the outer third a little above the apex to the inner margin. In the dark area is a submarginal band of large silvery-blue lunules, extending from the second subcostal nervule to the inner margin; these lunules are centred with large contiguous oval black spots, the three spots nearest the anal angle narrower than the others; the tails, which are single, are rather thick.

Body black, abdomen white beneath.

Hab. Guadalcanar, Solomon Islands (C. M. Woodford).

In the Collection of Mr. H. Grose-Smith.

Allied to P. (Amblypodia) Critala, Felder. Felder's original description of P. Critala is that of a female. Hewitson and Standinger have figured two males under this name, which appear to belong to two distinct species.

GENUS EPIMASTIDIA.

Epimastidia, H. H. Druce, "Proceedings of the Zoological Society of London," 1891, p. 365.

I.—EPIMASTIDIA ALBOCÆRULEA. &. Figs. 6, 7. g. Fig. 8.

Epimastidia Albocarulea, H. Grose-Smith, "Annals and Magazine of Natural History," ser. 6, vol. 13, p. 501 (1894).

Exp. $1\frac{1}{4} - 1\frac{1}{3}$ inches.

Male. Upperside brilliant cerulean-blue, with the outer margins of both wings narrowly black. Posterior wings with the costal third and inner margin greyish-black.

Underside white, with the outer margins of both wings dull black, centred with velvety-black lunules, bordered inwardly with bright blue lunules, and outwardly with conical bright blue spots, towards the base of which is a series of velvety-black bars, almost covering the outer edge of the blue spots, which is only indistinctly seen.

Body black above, clothed with bluish-grey hair, mostly white beneath.

Female. Upperside blue, with the hind margins broadly, and the costa of the anterior wings more narrowly, black. Inner margin of posterior wings grey.

Underside yellowish-white, inner marginal area of anterior wings broadly pure white; costa of the same wings edged with a narrow black line. The inner edge of the black border is a little dentated, and it contains a row of oblong deeper black spots, a little rounded inwardly, where they are bordered with blue curves; towards the margin they are crossed by a row of long subtriangular or lunular blue spots, which, on the posterior wings, rest on slender blue bases, which are merely indicated on the anterior wings.

Body bluish-grey above; white beneath.

Hab. New Britain (Webster and Ribbe).

The Male is in the Collection of Mr. H. Grose-Smith, and the Female in the Hon. Walter Rothschild's Collection.

Very near *E. Arienis*, Druce, from the Solomon Islands, but more brilliant blue on the upperside, and on the underside the outer dark margins, in which the blue lunules and spots are very brightly distinguished, are broader and blacker.

II.—EPIMASTIDIA SODALIS. ?. Fig. 9.

Exp. $1\frac{1}{3}$ inch.

Female. Upperside black towards the margins, and grey, dusted with pale blue towards the base, the two colours being separated by a broad white band, not extending to the costa of the anterior wings, and shading into the grey colour of the base and inner margin below the middle of the posterior wings.

Underside white, with broad brown hind margins, and costa of anterior wings edged with a black line. On the border stands a series of large oblong black spots between the nervures, bordered within by bluish-white curves, and crossed outwardly by a row of subtriangular white spots edged with bright blue scales.

Body as in E. Albocarulea.

Hab. New Britain (Webster, 1894).

In the Collection of Mr. H. Grose-Smith.

This insect so closely resembles the last, except in colour, that the authors were at first inclined to regard it as a dismorphic female of the same species. However, on careful comparison, the following differences were observed, apart from colour:—

On the UPPERSIDE the black border is distinctly broader, not only on the posterior margin of all the wings, but also on the costa of the anterior wings. On the UNDERSIDE the brown border is paler, narrower, and more regularly situated, and is suddenly narrowed at the hinder angle of the anterior wings. The double row of submarginal markings is white, rather than blue, and the outer row, which is indicated on the anterior wings, and forms regular bases to the outer blue spots on the posterior wings in *E. Albocærulea*, is here entirely absent.

This insect is possibly the female of *E. Arienis*, H. H. Druce, "Proceedings of the Zoological Society of London," 1891, p. 365, pl. 32, fig. 2, from the Solomon Islanda (Florida Island). It agrees with Mr. Druce's figure of the underside of his insect, in the characters in which *E. Arienis* differs from *E. Albocærulea*.

GENUS LAMPIDES.

I.—LAMPIDES ECLECTUS. ¿. Figs. 12, 13. ¿. Fig. 14.

Lampides Eclectus, H. Grose-Smith, "Novitates Zoologicæ," I., p. 589 (1894).

Exp. δ . $1\frac{1}{2}$ inches; \circ . $1\frac{3}{8}$ inches. vol. II., APRIL, 1897.

Male. Upperside resembles L. Euchylas, Hübner, but the greyish-brown spots within the black border of the posterior wings are narrower.

Underside also resembles L. Euchylas, but the dark areas on both wings are blackish grey, instead of brown. On the anterior wings the dark band along the outer margin is broader, and on the posterior wings the velvety-black spots which cross the disc before the outer margin are crowned internally with narrow shining light blue lunules, which extend partially down the veins between the spots; the black spots are crossed on the outer margin by narrow darker blue lunules, except the spot which is situate between the lowest median nervule and the submedian nervure, which is bordered on each side along the veins by a metallic blue streak. In L. Euchylas the internal lunules are whitish, and those on the outer margin, of which there are only two towards the apex, are greyish-white, the other external lunules of L. Eclectus being replaced by metallic blue vertical streaks. The dark basal band is broader than in L. Euchylas.

Head black, with white orbits, and antennæ ringed with white. Body pale blue above; pectus blackish; legs and under-surface of abdomen white.

Female. Upperside. Resembles the female of L. Euchylas, but is nearly black, with white spaces as in L. Euchylas, which, however, are more restricted.

Underside with similar differences, the blue lumules on the posterior wings being very conspicuous. The wings of both sexes are rather more elongate than in L. Euchylas.

Hab. New Guinea (Friedrich Wilhelms Hafen, Stephansort, Simbang, and the Sattelberg) (Doherty).

In the Collections of the Hon. Walter Rothschild and of Mr. H. Grose-Smith.

In the markings on the Underside this species somewhat resembles L. Alcas and L. Aleas, Felder, but on the anterior wings of L. Eclectus none of the lines and markings are blue, and on the posterior wings of L. Eclectus the blue lunules are much more conspicuous. On the Upperside both of Dr. Felder's species are more azure-blue, and their posterior wings are without the submarginal row of spots.

II.—LAMPIDES ALLECTUS. 6. Figs. 15, 16.

Lampides Allectus, H. Grose-Smith, "Novitates Zoologicæ," I., p. 576 (1894).

Exp. $1\frac{1}{4}$ inch.

Male. Upperside. Both wings very bright azure-blue, crossed from a little below the cell of the anterior wings and before the middle of the posterior wings to the inner margin by a pure white band; outer margins of anterior wings narrowly, and of posterior wings rather more broadly, black, the latter rather irregularly black on the inner edge.

Underside smoky-brown; the white band broad on the inner margin, and narrower and slightly incurved above, ceasing at the middle discoidal nervule; a short bluish-white line at the base of the costa. Posterior wings with the outer half from the middle of the costa to the middle of the inner margin black, traversed by two rows of very conspicuous brilliant blue conical lunules, and a submarginal row of blue lines, a broad white band inside the black outer half; base rather broadly black, with a blue line on the costa.

Body as in L. Eclectus.

Female. Upperside. Both wings dusky brown-black, with a dusky white ill-defined band commencing at the end of the cell of the anterior wings, crossing the inner margin at the middle, and terminating at the inner margin of the posterior wings on its upper third. There are no traces of blue on the upperside.

Underside exactly as in the male.

Hab. New Guinea, Humboldt Bay, Sept.-Oct., 1892 (Doherty).

In the Collections of the Hon. Walter Rothschild and of Mr. H. Grose-Smith.

Allied to L. Aleuas, Felder, but deeper blue on the upperside, and the blue markings on the underside more developed; the white area in both sides more restricted, and the female without the blue shading towards the base of the wings.

III.—LAMPIDES PARALECTUS. 9. Fig. 17.

Male. Upperside closely resembles L. Eclectus, but is of a darker azureblue, and the white area on the anterior wings is rather less oblique and narrower at its base; on the posterior wings the white area is rather more extended.

Underside. On the anterior wings the dark spot at the end of the cell, which in *L. Eclectus* is bordered by a narrow white line, is scarcely visible; the spot beyond, nearer the apex, is more oblique, the submarginal white line of *L. Eclectus* is obsolete, and the inner row of narrow zigzag lines which are white in that species, is blue. On the posterior wings the submarginal white line of *L. Eclectus* is also obsolete, the double row of zigzag lines is brighter and darker

blue, and the dark area beyond them is more restricted. It is the same size as L. Eclectus, but the wings are rounder.

Female. Upperside brownish-black, with a common white band, covering the posterior wings from near the base to two-thirds of their length, and extending obliquely upwards on the anterior wings for two-thirds of the distance to the apex. On the anterior wings the space above the white band is dusted with bright blue to the base, and nearly to the costa, and the lower part of the white band on the posterior wings is also bordered with blue outside; towards the anal angle of the latter is an indistinct blue submarginal line.

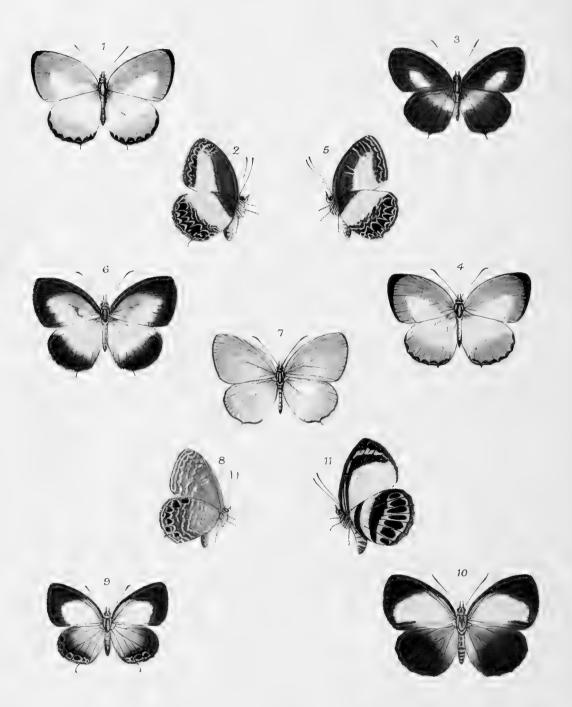
Underside differs from the female of L. Eclectus in similar particulars to those in the foregoing description of the male; the dark area on both wings of L. Paralectus is browner and narrower than on L. Eclectus, and the blue markings are much darker blue.

Hab. New Ireland.

In the Collection of Mr. H. Grose-Smith. The male will be figured in a subsequent Part.



ORIENTAL LYCÆNIDÆ, XIII. LAMPIDES II THYSONOTIS V.



Horace Knight delet lith

West, Newman 1mp.

1.2.LA	MPIDES	PARALECTU	Sð	7.8.LAN	MPIDES	AMPHISSINA
3 .		ALLECTUS			*'	n
4.5.	13	EPILECTUS	3	10.11. THY	SONOTIS	PHROSO.
6 .	33	33	7			

LYCÆNIDÆ (ORIENTAL). PLATE XII.

II.—LAMPIDES ALLECTUS. GROSE-SMITH. Q. FIG. 3.

Female. Vide anteà, Vol. II., "Oriental Lycaenidae," XI. Lampides, page 6.

In the Collection of Mr. H. Grose-Smith.

III.—LAMPIDES PARALECTUS. GROSE-SMITH. & Figs. 1, 2.

Male. Vide anteà, Vol. II., "Oriental Lycænidæ," XI. Lampides, page 7.

In the Collection of Mr. H. Grose-Smith.

IV.—LAMPIDES EPILECTUS. 8. Figs. 4, 5. q. Fig. 6.

Lampides Epilectus, H. Grose-Smith, "Annals and Magazine of Natural History," Series 6, Vol. XIX., p. 179 (February, 1897).

Exp. 13 inch.

Male. Upperside resembles L. Eclectus, Grose-Smith, but on the anterior wings the apex is more broadly greyish-black, and on the posterior wings the blue area is more restricted.

Underside. Scarcely differs from L. Eclectus, but on both wings the outer marginal dark area is narrower, the central white area being correspondingly broader.

Female. Upperside. Anterior wings differ from that sex of L. Eclectus, in having the basal blue area more vivid and extended, and the outer marginal dark area is somewhat narrower than in L. Eclectus, and more broadly margined interiorly with blue.

Underside. The outer marginal dark area of the anterior wings is vol. III., October, 1897.

narrower; on the posterior wings the inner row of obscure black markings, bordered with white, which crosses the disc, is situate further from the outer row.

Hab. Fergusson Island (Meek).

In the Collections of Mr. Grose-Smith and the Hon, Walter Rothschild.

V.—LAMPIDES AMPHISSINA. &. Figs. 7, 8. g. Fig. 9.

Lampides Amphissina, H. Grose-Smith, "Novitates Zoologicæ," Vol. I., p. 577 (1894).

Exp. Male, $1\frac{3}{8}$ inch.; Female, $1\frac{1}{4}$ inch.

Male. Upperside. Both wings paler and more shining blue than L. Imphissa, Feld. On the posterior wings the dark submarginal spots towards the anal angle of that species are absent; both wings are shorter and rather less opaque, the markings on the underside being indistinctly visible.

The Underside closely resembles L. Amphissa, but is more slate-coloured, and the markings are whiter and more distinct. On the anterior wings the double row of white lines across the disc is more vertically situated, those on the costal margin being further from the apex. On the posterior wings the dark submarginal spots between the veins towards the apex are more conical. The submarginal band of orange lunules which in L. Amphissa extends from the inner margin above the anal angle into the interspace, beyond the uppermost median nervule, is represented by two orange lunules and part of another in the interspaces between the median nervules and submedian nervure.

Female. UPPERSIDE. Differs from that sex of L. Amphissa on the anterior wings, in the pale space in the middle being more restricted, the basal half of the costa being broadly greyish-black, the same colour as the apical and outer-marginal area, and densely dusted with blue scales; on the posterior wings there is an indistinct submarginal row of black spots partially surrounded by dark blue, and the basal half is darkish blue.

Underside. The costal area, apex, and outer fourth of the disc of the anterior wings are slate-coloured grey with pale whitish markings, the rest of the wings white; posterior wings with the costal margin broadly whitish, the rest of the wings grey, with spots and markings as in the male.

Hab. Humboldt Bay.

In the Collections of the Hon. Walter Rothschild and Mr. H. Grose-Smith.

THYSONOTIS. V.

XIX.—THYSONOTIS PHROSO. Q. Figs. 10, 11.

Thysonotis Phroso, H. Grose-Smith, "Novitates Zoologicae," Vol. IV., p. 313 (August, 1879).

Exp. 15 inch.

Female. Upperside. Anterior wings with the costal margin and apical third brownish-black, the black area extending rather broadly down the outer margin to a little above the submedian nervure, whence it extends broadly along the inner margin to one-half the distance from the base, the rest of the wings are white with a basal patch of blue scales, which extend partially along the inner margin; there is also a blue streak along the costal nervure to half its length. Posterior wings brownish-black, with a white streak along the costal margin, the basal third is densely irrorated with blue scales, extending over and below the cell.

Underside. Anterior wings, with the costal margin and the apical third black, thence along the outer margin narrowly black, the dark costal and apical area is centred with a rather broad curved band of shining blue scales, interrupted about the middle. Posterior wings with the outer two-thirds, and a broad sub-basal band black, in the outer black area is a very broad band of blue, centred by seven oval black spots between the veins, a white band crosses the wings before the middle and extends more narrowly along the costal margin towards the apex; the lower half of the white band is densely irrorated with blue scales, and there is a blue streak at the base. Cilia of both wings black.

Hab. Etna Bay, Dutch New Guinea (Webster).

In the Collection of the Hon. Walter Rothschild.

Described from four female specimens, the male remains to be discovered. The female on the upper wings resembles *T. Wallacei*, Feld., but the white area is more extended, and the broad basal irroration of blue scales on the upperside of both wings, the absence of the basal white band on the upperside of the posterior wings, the much wider blue area on the underside of those wings, and the black cilia of both wings suffice to separate it from that species.



ORIENTAL LYCÆNIDÆ, XIII.



Horace Knight del et lith.

West, Newman imp

1,2.HO	LOCHILA	LAMIA, 8.	7,8.HO	LOCHILA	ZITA,?.
3.	>>	"	9,10.	*1	MARGINATA, &.
4.5.	31	SPEIRION, J.	11,12.	17	ZISKA,J.
6.	13	9 .	13 .	11	٩.

LYCÆNIDÆ (ORIENTAL).

PLATE XIII. HOLOCHILA III.

XIV.—HOLOCHILA LAMIA. 8. Figs. 1, 2. g. Fig. 3.

Holochila Lamia. H. Grose-Smith, "Annals and Magazine of Natural History," Series 6, Vol. XIX., p. 179 (February, 1897).

Exp. δ . $1\frac{1}{4}$ inches; \mathfrak{g} . $1\frac{1}{8}$ inches.

Male. Upperside. Resembles H. Absimilis, Feld., but slightly more violaceous; the cilia of the posterior wings are crossed with black at the ends of the veins.

Underside. Greyish silvery white, with the base of the wings pale greenish-blue, which on the posterior wings extends over the basal fourth. Anterior wings with a grey line at the end of the cell and three dark grey lines across the disc, the outermost being on the margin and the two inner ones being sinuate, with the spaces between rather paler than the rest of the wings; in the interspaces between the veins near the outer margin is a row of hastate dark grey markings. The posterior wings are likewise crossed by three dark grey lines, with the interspaces paler than the basal portion of the wings; the outer line on the margin very narrow, the middle line very deeply indented inwardly, and the third line very sinuate; between the two outer lines is a row of spots resembling an inverted T; there is a fourth irregular line crossing the wings a little beyond the cell and curving round it; two spots and a streak in the cell; one spot above and three spots below the cell nearer the base.

Female. Upperside. Anterior wings greyish-black, with a blue streak crossing the wings longitudinally, and extending narrowly along the lower part of the cell, thence widening over the middle part of the disc, with an irroration of blue scales below the cell. Posterior wings dark grey, with the outer margin rather broadly greyish-black, becoming wider towards the apex, cilia of both wings grey, which on the posterior wings are crossed by black at the ends of the submedian nervules and submedian nervure.

Underside resembles the male, but the black lines and spots are rather more strongly marked.

Hab. Fergusson Island (Meek).

The male is in Mr. H. Grose-Smith's Collection, the female in that of the Hon. Walter Rothschild.

XV.—HOLOCHILA SPEIRION. &. Figs. 4, 5. Q. Fig. 6.

Philiris Speirion, H. H. Druce, "Annals and Magazine of Natural History," Series 6, Vol. XIX., p. 13 (January, 1897).

Exp. δ 1 inch; \mathfrak{L} $1\frac{1}{4}$ inches.

This butterfly having been recently described by Mr. H. H. Druce, it seems scarcely necessary to re-describe it, the figures supplied in this work supplementing his description. The specimen of the male here figured seems to be smaller, and of the female rather larger than Mr. Druce's specimens.

Hab. Fergusson Island (Meek).

In the Collection of Mr. H. Grose-Smith and others.

XVI.—HOLOCHILA ZITA. 9. Figs. 7, 8.

Holochila Zita, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 511 (December, 1895).

Exp. $\frac{7}{8}$ inch.

Female. Upperside. Bright shining blue. Anterior wings with the costal margin, apical area, and outer margin broadly greyish-brown. Posterior wings with the costal area broadly and outer margin less broadly greyish-brown; the veins on both wings where they cross the blue area are black. Cilia on anterior wings brown, on posterior wings grey.

Underside. Both wings greenish silvery white; cilia as on the upperside. Antennæ black.

Hab. Tenimber (Doherty).

In the Collection of the Hon. Walter Rothschild.

Four specimens, apparently all females. The wings are comparatively longer and narrower than in other species of the genus.

XVII.—HOLOCHILA MARGINATA. 8. Figs. 9, 10.

Holochila Marginata, H. Grose-Smith, "Novitates Zoologica," Vol. I., p. 579 (July, 1894).

Exp. 1 inch.

Male. Upperside. More violaceous-purple than H. Intensa, Butl., and H. Ilias, Feld. Anterior wings with the costal margin, apical third, and outer margin very broadly brown-black. Posterior wings with the costal margin paler and the outer margin rather broadly brown-black, the inner edge of the dark band being irregular; the wings are more acutely angulated at the anal angle.

Underside. Differs from both the above species in the veins on the anterior wings not being tipped with black.

Hab. Humboldt Bay (Doherty).

XVIII.—HOLOCHILA ZISKA. &. Figs. 11, 12. Q. Fig. 13.

Exp. $\delta 1\frac{1}{8}$ inches; $\mathfrak{L} 1\frac{1}{4}$ inches.

Male. Upperside closely resembles H. Philotus, Feld., but more iridescent, and the apex of the anterior wings is more acute; in certain lights the apex and costal margin are brownish-black. On the posterior wings the costal margin is rather broadly white.

UNDERSIDE. Brownish silvery white.

Female. Upperside. Both wings iridescent rather dull blue. Anterior wings with the base, costal and outer margins broadly greyish-black. Posterior wings with the costal margin broadly greyish-brown, and outer margin more narrowly greyish-black, the veins crossing the blue area conspicuously greyish-black, which colour gradually widens along the veins towards the outer margin.

Underside. As in the male.

Hab. Kapaur, Dutch New Guinea (Doherty).

In Mr. H. Grose-Smith's Collection.

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ORIENTAL LYCAENIDAE, XIV.



Horace Knight del. et lith.

West, Newman imp.

1,2.ARHOPALA SOPHROSYNE, 3. 6,7.ARHOPALA STROPHE, 3. 3. 4.5. " \$. 8,9. " YENDAVA, 3. 4.5. " CLARISSA, \$. 10. " " \$.

LYCÆNIDÆ (ORIENTAL).

PLATE XIV.

ARHOPALA I.

I.—ARHOPALA SOPHROSYNE. &. Figs. 1, 2. Q. Fig. 3.

Arhopala Sophrosyne, Grose-Smith, "Entomologist's Monthly Magazine," XXV., p. 300 (1889); H. H. Druce, "Proceedings of the Zoological Society of London," 1891 p. 357, Plate XXXII., fig. 9, 3.

Exp. 2 inches.

Male. Upperside. Brilliant metallic azure-blue, shading along the costa of anterior, and the apex and outer margins (which are black) of both wings, to ultramarine; costal area of posterior wings brownish-black; abdominal fold greyish-brown.

Underside. Basal half of anterior wings, a dark blotch beyond the cell, a rather oblique band of confluent spots, and a rather broad marginal band, dark olivaceous-brown, the rest of the wings very pale olivaceous-brown; two small silvery spots in the cell near the base, an oval silvery spot centred with brown near the end of the cell, an irregular whitish-brown line at the end of the cell, an indistinct reniform dusky marking below the cell. Posterior wings dark olivaceous-brown; a pale olivaceous-brown band from the apex, where it is rather broad, gradually narrowing down to the second median nervule; several pale olivaceous spots and markings near the base and across the middle; a narrow, submarginal, silvery-blue line above the tails, and thence to the anal angle, above which is a broad black band irregularly dentate inwardly, and intersected by an interrupted, irregular row of metallic blue markings.

Female. Upperside. Resembles the male, but darker; on the anterior wings the costal, apical, and outer margins are broadly black, as well as the costal and apical portion of posterior wings.

Underside. Same as the male, but paler.

Hab. Guadaleanar (Woodford).

Nearest to A. Æxone, Hew. The colouring of the male on the upperside resembles A. Sophax, Mathew, which is a smaller insect; the undersides are very different.

The male is in the Collections of Messrs. Godman and Salvin and H. Grose-Smith, and the female in Mr. H. Grose-Smith's Collection.

VOL. III., JANUARY, 1898.

II.—ARHOPALA CLARISSA. 2. Figs. 4, 5.

Arhopala Clarissa, H. Grose-Smith, "Novitates Zoologicæ," Vol. IV., p. 366 (August, 1897).

Exp. $1\frac{7}{8}$ inches.

Male. Upperside. Both wings silvery lacteous white, very faintly tinged with blue. Anterior wings with an apical dark brown band, which extends broadly over the subcostal nervules nearly half-way to the base, and along the outer margin gradually narrowing to the outer angle; in that part of the band which extends along the costa is, in certain lights, a brilliant morpho-blue oblong patch, and the inner edge of the band along the outer margin is narrowly bordered by a similar colour. Posterior wings with the costal margin towards the apex pale greyish-brown, a submarginal narrow black bar from the anal angle nearly to the lowest submedian nervule, a shorter bar between the next two veins, and an indication of other black lines between the veins to the apex; outer margin greyish-black; a slender black tail, tipped with white.

Underside has a general resemblance to A. Anthore, Hew., and A. Helius, Cram.; but on the anterior wings the space below the median nervure to the inner margin is white, crossed, between it and the submedian nervure, by three greyish-brown bars. On the posterior wings the white markings are differently arranged, and the metallic blue lunules towards the anal angle are paler silvery blue, bordered internally by a space irrorated with grey and white scales. Cilia of both wings white.

Hab. S. Celebes (August-September, 1891).

In the Collection of the Hon. Walter Rothschild.

III.—ARHOPALA STROPHE. &. Figs. 6, 7.

Arhopala Strophe, H. Grose-Smith, "Novitates Zoologicæ," Vol. IV., p. 366 (August, 1897).

Exp. $1\frac{5}{8}$ inches.

Female. Upperside. Both wings silvery cerulean-blue. Anterior wings with the costal margin and the apical third dark brown, the dark area extending rather broadly along the outer to the inner margin. Posterior wings with the costal margin broadly pale greyish-brown, and the outer and inner margins rather broadly dark brown; the veins crossing the disc dark brown. One broad

tail; cilia white from the upper median nervule to the anal angle, crossed by brown at the ends of the veins.

Underside. Both wings brownish-white, with bars and spots bright purplish-brown. Anterior wings with the base, a spot in the cell near the base, two broad bars from the costal margin, where they coalesce, to the median nervure, one of which crosses the cell, and the other is at the end of the cell and extends beyond it; another narrower rather sinuate and oblique bar, halfway towards the apex, from the costal margin nearly to the lowest submedian nervule, a narrow paler submarginal line of the same length, and a broad marginal band. Posterior wings with a row of spots extending obliquely from the costa near the base to the end of the cell; beyond this two broad bars cross the wings from the costa to the upper median nervule, where they merge in a dark space which covers the middle of the disc and extends broadly below the median nervure to the base; a broad band on the outer margin, bordered inwardly by a narrow paler line; a dark spot above the anal angle, above which is a dark band confluent with the dark central space and extending along the inner margin; a sinuate pale submarginal line towards the anal angle. Antennae black above, rufous beneath; head, thorax, and abdomen grey, the last being tawny beneath.

Hab. Kapaur, Dutch S.W. New Guinea (Doherty).

On the upperside it somewhat resembles the female of A. Eurisus, Druce, and of A. Eu-phrosyne, Grose-Smith, but on the underside it differs entirely from any known species.

In the Collection of the Hon. Walter Rothschild.

IV.—ARHOPALA YENDAVA. &. Figs. S, 9. Q. Fig. 10.

Arhopala Yendava. H. Grose-Smith, "Annals and Magazine of Natural History," Series 5, Vol. XIX., p. 297 (April, 1887).

Exp. $2\frac{1}{4}$ inches.

Male. Upperside. Lilac-purple, margins narrowly dark brown.

Underside. Brown. Anterior wings with an obscure spot on the middle of the costa; the middle of the disc is crossed by a transverse band of six confluent spots, the first four curving outwards, the fifth further from the outer margin, the sixth in a line with the fourth; two spots in and a dark bar at the end of the cell, and a submarginal indistinct band. Posterior wings with seven basal and sub-basal spots, two being below the subcostal

nervure, one in the middle and one at the end of the cell, two below the median nervure and one on the inner margin, and a central band of spots, of which the first two are distinct, the next four confluent, the seventh angulated, and the eighth on the inner margin elongated; all the spots are bordered by pale rings; a submarginal indistinct band; a black spot at the anal angle, above which and on each side of the tail is an irroration of silvery greenish-blue, with the base of each black.

Female violet-purple, with broad dark brown costal and outer margins.

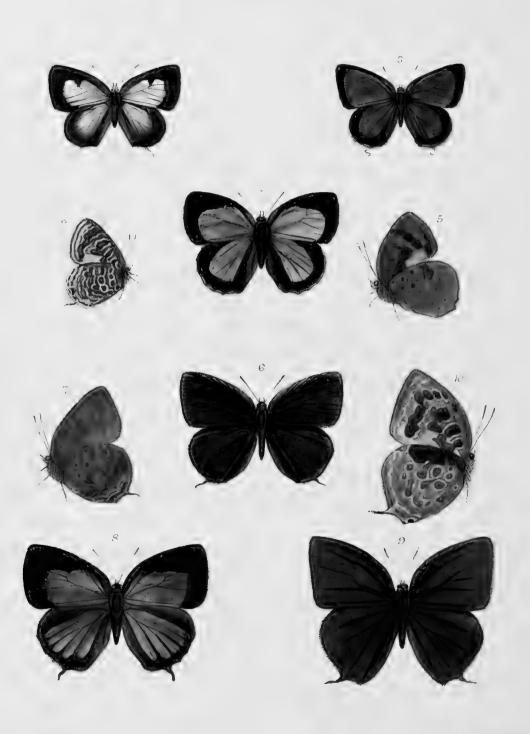
Hab. Yendaw, Burmah.

In the Collection of Mr. H. Grose-Smith.

Near A. Atosia, Hew., but much larger, and the arrangement of the spots on the underside is quite different.



DRIEDIAI LYCAENIDAE, XV. ARHOPALA II



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LYCÆNIDÆ (ORIENTAL).

PLATE XV.

ARHOPALA II.

V.—ARHOPALA BIRMANA. &. Figs. 1, 2. P. Fig. 3.

Arhopala Birmana, Moore, "Proceedings of the Zoological Society of London," 1883, p. 531.

Exp. $1\frac{3}{8}$ inches.

"Allied to A. Ganesa, Moore. Male. Upperside. Both wings with similar blue discal areas, that on the forewing being confined more to the base.

"Underside. Both wings dark brown. Forewing with similar but much darker and broader markings, which have whiter borders, the interspace between the second and third cell-spots, and between the latter and the discal band, of the same dark brown as the wing, not white as in A. Ganesa. Hindwing with very similar markings, but all dark brown and with white borders; anal lunules blue-speckled.

"Female. Upperside. Both wings with darker blue, extending from the base broadly over the discal area.

Underside. Both wings as in the male."

Hab. Toungu, British Burma.

Mr. de Niceville remarks ("Butterflies of India, etc.," Vol. III., p. 274): "The points of difference between A. Birmana and A. Ganesa seem to me to be greater than the points of resemblance. The much darker colour of the ground on the underside, and the presence of the blue-speckled anal lunules on that side of the hindwing, should make this species of easy recognition to anyone possessing specimens of A. Ganesa."

In the Collection of Mr. Grose-Smith (types 3 and 2).

VI.—ARHOPALA TOUNGUVA. 8. Figs. 4, 5.

Amblypodia Toungura, H. Grose-Smith, "Annals and Magazine of Natural History" (October, 1887).

Exp. $1\frac{1}{2}$ inches.

Male. Upperside. Brilliant violaceous-blue, the apex, costa from the vol. III., April, 1898.

base, and exterior margin of anterior wings, and the exterior margin of posterior wings broadly brown-black.

Underside. Pinkish-brown, slightly suffused with purple. Anterior wings with two spots in the cell and one beyond the cell, followed by a broad straight band of contiguous spots, the spots all being brown bordered with lighter pinkish-brown, a broad brown patch below and beyond the cell and reaching almost to the base, beneath which the space to the inner margin is pale brown, a submarginal row of dark brown markings, widest at the outer angle, gradually tapering and becoming obsolete towards the apex. Posterior wings with numerous brown spots bordered with light pinkish-brown.

Female. Upperside paler and margins less broadly black.

Hab. Toungu, Burma.

In the Collection of H. Grose-Smith.

VII.—ARHOPALA HYLANDER. &. Figs. 6, 7. P. Fig. 8.

Arhopala Hylander, H. Grose-Smith, "Novitates Zoologicæ," Vol. I., p. 582 (July, 1894).

Exp. & $1\frac{3}{4}$ inches; $2 1\frac{7}{8}$ inches.

Male. Upperside scarcely differs from A. Periander, Grose-Smith, but is rather bluer purple.

Underside. Both wings more uniformly brown, with the spots less clearly defined by pale lines. On the anterior wings the discal row of spots is very indistinct; the middle spots in it are situate out of line nearer the base, the upper spots curve inwardly, and there are no spots on either side of the submedian nervure, as in A. Periander. On the posterior wings the discal row of spots is more irregular than in that species or in A. Philander, Feld.

Female. Both wings less rosy-purple than in that sex of A. Philander. On the anterior wings the coloration is much more restricted on the disc, which is also the case on the posterior wings and towards the anal angle. On the underside the bands are wider than in A. Philander, the band on the anterior wings towards the costal margin curving inwardly, instead of being nearly straight, as in A. Philander.

Hab. Biak; a pair (Doherty).

In the Collection of the Hon. Walter Rothschild.

VIII.—ARHOPALA ANTHARITA. 9. Figs. 9, 10.

Arhopala Antharita, H. Grose-Smith, "Novitates Zoologicae," Vol. I., p. 583 (July, 1894).

Exp. nearly 2 inches.

Female. Upperside. Both wings rich bronze-coloured brown, slightly suffused with purple in certain lights.

Underside somewhat resembles A. Anunda, Hew. Anterior wings with two spots crossing the cell, that nearest the base oval, the other reniform; a large quadrate spot at the end of the cell, the inner and outer edges of which are undulated; an oblong spot above it, near the costa; a subovate spot between the two lowest median nervules at their junction with the discocellular nervule, and a large broad V-shaped spot below the cell; the disc is crossed by a broad band of spots, the four uppermost placed very obliquely, the others nearly vertical; an indistinct broad band on the outer margin. Posterior wings with a round spot near the base below the costal nervure, and two very large patches beyond, the outermost of which extends from the costal margin over the interspace between the first and second subcostal nervules, the other spots nearly as in A. Anunda; a few dark bars a little before the outer margin, and a dark velvety spot above the anal angle, crowned with a few bluish-grey scales; all the spots and markings on both wings are brown, margined on each side with pale pinkish-brown lines; the ground-colour is paler pinkish-brown than the spots, except the space below the lowest median nervule to the inner margin of the anterior wings, which is greyish-brown.

One specimen only.

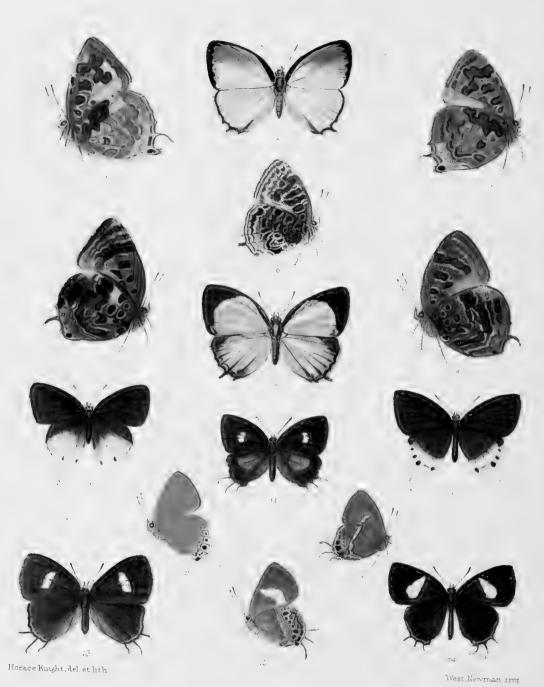
The underside has a strong superficial resemblance to A. Anunda, but the very large subcostal brown spots on the posterior wings at once distinguish it from that species, while on the upperside it bears no resemblance to it.

In the Collection of the Hon. Walter Rothschild.





ORIENTAL LYCAENIDE XXV. ARHOPALA III.&c.



ARHOPALA ALCESTIS & ATHARA &

MINATURE :

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PLATE XXV.

ARHOPALA. III.

IX.—ARHOPALA ALCESTIS. &. Fig. 1.

Exp. $1\frac{3}{4}$ inches.

Male. Upperside. Dark bluish-purple, outer margins narrowly black.

Underside. Both wings closely resemble the specimen which is figured by Mr. Hewitson as the female of his A. Alce, but on the anterior wings the fifth spot in the transverse band is more extended outwardly and the sixth spot is broader; the spot at the end of the cell is broader and crossed at its middle by a curved brownish-white line; there is a dull spot below the cell towards the base in the interspace between the lowest median nervule and the sub-median nervure.

The posterior wings scarcely differ from those of the so-called female of A. Alce; but there is a rather conspicuous white patch between the two subcostal nervules which in Hewitson's figure is coloured brown, and the two brown markings at the upper side of the cell towards the base are joined, the outer marking being tooth-shaped instead of a spot. The cilia are uniformly brown instead of being crossed by white.

Hab. Milne Bay, British New Guinea (Meek).

In the Collection of the Hon. Walter Rothschild.

The specimen figured by Hewitson as the female of A. Alce is from Aru, and is quite distinct from the species which he figures as the male; if it is not identical with A. Alcestis it should be described separately.

X.—ARHOPALA ATHARA. 8. Fig. 2.

Exp. $1\frac{3}{4}$ inches.

Male. Upperside. Resembles A. Alcestis, but the outer margins are more broadly black, especially so at the apex of the posterior wings.

vol. 111., JULY, 1902.

Underside. Somewhat resembles the male of A. Alce, but on the anterior wings the third and fourth spots in the transverse band are rather more out of line and less elongate outwardly; the first spot in the band, on the costa, is abbreviated, the spot in the cell near the base is rounder and smaller.

On the posterior wings the dark band of spots on the middle upper part of A. Alce is represented by a cluster of dark spots more elongate towards the apex and less extended into the middle, and the dark spot crossing the end of the cell of A. Alce is represented only by two pale brown lines, the other markings are also less distinct.

Hab. Stephansort, German New Guinea.

In the Collection of Mr. Grose-Smith.

XI.—ARHOPALA ADHERBAL. 3. Fig. 3.

Exp. $1\frac{5}{8}$ inches.

Male. Upperside. Violet-blue, with narrow black margins.

Underside. Both wings pinkish-brown. Anterior wings with two round spots in the cell, one reniform spot at the end of the cell and a rather curved transverse band crossing the wings from the costa, at about onethird from the apex to the submedian nervure; a triangular spot below the cell at the junction of the middle and lowest median nervules with the discocellular nervules and a dark space below the median nervure, the spots and bands bordered by pinkish-white lines; an indistinct band crosses the wings a little before the apex and the outer margins are broadly pinkish-brown. Posterior wings with four spots near the base, of which one is in the cell, another large round spot in the middle, and a reniform spot at the end of the cell followed by a curving band of spots which crosses the wings from the costa about its middle to the inner margin; the two spots nearest the costa are large, the space between them and a spot nearer the base being pale pink, the rest of the band about half the width of the two upper spots but becoming wider towards the inner margin; two spots below the cell—all the spots are bordered with pale pinkish lines and the ground colour is darker in the middle and on the outer margin, where towards the anal angle is a series of four black spots crowned by metallic green scales.

Hab. Milne Bay (Meek).

In the Collection of the Hon, Walter Rothschild.

XII.—ARHOPALA APPIANUS. 8. Fig. 4.

Exp. $1\frac{3}{4}$ inches.

Male. Upperside. Resembles A. Adherbal, but the outer margins of the posterior wings are rather browner.

Underside. Anterior wings with spots and markings similar to A. Adherbal but narrower, the transverse band crossing the disc is little more than half the width of that band in A. Adherbal, and ceases on the submedian nervure; the lower third of the wings paler brown than the rest of the wings.

On the posterior wings the discal band of spots is likewise narrower, the two upper spots in it being little more than half the size of those in a similar position in A. Adherbal; several minor differences occur which are scarcely capable of being described in words.

Hab. Humboldt Bay (Doherty).

In Mr. Grose-Smith's Collection.

XIII.—ARHOPALA HELIANTHES. &. Figs. 5, 6. P. Fig. 7.

Male. Upperside. Resembles Arhopala Helius, Cram., but on the anterior wings the outer margins are more broadly black, especially at the apex; on the posterior margins the cilia are brownish-white instead of brown.

Underside. The anterior wings are more greyish-brown, but the markings scarcely differ from A. Helius; the wings are rather more rounded at the apex. On the posterior wings the spots are narrower and more distinct; below the cell towards the inner margin is a whitish area, the spots in which are indistinct, smaller and arranged differently from the spots in the same position on the wings of A. Helius, below which to the anal angle the wings are widely grey irrorated by pale blue scales, and crossed by narrow sinuate lines.

Female. Upperside differs from the same sex of A. Helius in the wings being rounder. On the anterior wings the outer margin and apical area is more broadly black, the costal margin being more narrowly black, the lower part of the black outer marginal area is invaded by the blue colour, which surrounds a black spot towards the outer angle. On the posterior wings, the median nervules are black, becoming more broadly black towards the outer margin; the outer marginal black band is sinuate, not straight as in A. Helius.

The underside does not differ from the male, but the whitish area below the cell towards the inner margin is very distinctly marked.

Hab. Milne Bay (Meek).

In the Collection of the Hon. Walter Rothschild.

Allied to A. Helius, but a smaller insect. On the upperside of the female the difference between it and A. Helius \mathfrak{P} is more apparent than in the male.

GENUS ILERDA. DOUBL.

I.—ILERDA KIANA. &. Figs. 8, 9. P. Fig. 10.

Sithon Kiana, H. Grose-Smith, "Annals and Magazine Nat. History," Ser. 6, Vol. III., p. 317 (April, 1889).

Exp. δ . $1\frac{1}{8}$ inches; \mathfrak{P} . $1\frac{1}{4}$ inches.

Male. Upperside. Anterior wings dark brown. Posterior wings: basal and costal third dark brown, the remaining part light blue, shading to white towards the anal angle, at which there is a black spot; an oval black spot between the lowest and middle median nervule; one white tail, margin narrowly black; cilia white, spotted with black at the tips of the veins.

Underside. Anterior wings rufous-orange, a rather broad rufous band on the outer margin; inner margin narrowly grey; an indistinct short white line, edged externally with brown near the outer angle at the inner edge of the rufous band; an indistinct, interrupted, transverse grey line beyond the middle, becoming obsolete towards the costa. Posterior wings rufous-orange, the apical third of the margin rather broadly rufous, below which to the anal angle there is a rather broad marginal white band, narrowly black on the margin, in which, at the anal angle, is a black spot; beyond the tail is another black spot crowned with a brown bar, and connected with the anal spot by two narrow dark brown bars, and two smaller black spots beyond, the first of which has a narrow brown bar above it; above the spots and bars and extending nearly to the apex are a row of lunular white markings, edged narrowly with brown, and towards the middle an indistinct V-shaped white line.

Female. Upperside as in the male, but paler; the blue area on the posterior wings is narrower and greyer, with a submarginal row of five ill-defined black spots, the middle and anal spots being the largest.

Underside as in the male, but posterior wings paler and yellower.

Hab. Kina Balu, N. Borneo (Whitehead).

In the Collections of Mr. Whitehead (type) and Mr. Grose-Smith.

In some specimens the transverse grey line beyond the middle of the underside of the anterior wings is altogether obsolete.

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GENUS HORAGA. MOORE.

I.—HORAGA SAMŒNA. &. Figs. 11, 12. P. Fig. 13.

Horaga Samæna, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 513 (December, 1895).

Exp. 3. 1 inch; 2. 11 inches.

Male. Upperside. Dark brown, slightly violaceous towards the base of the anterior wings. On the anterior wings is a central white patch extending vertically across the space outside the cell and thence to the lowest median nervule, below which is a patch of violet scales. The posterior wings are centred with a violet patch, which extends about half-way across the cell and an equal distance beyond it.

Underside. Both wings olivaceous brown. Anterior wings with the white patch as on the upperside, but extending to the inner margin, where it widens; it is interrupted on the interspace below the lowest median nervule. Posterior wings with a narrow white band crossing the wings vertically to the lowest median nervule, thence curving to the inner margin and becoming irrorated with silvery bluish-green scales; the white band is narrowly edged internally by dark brown, a submarginal row of four black lunules commencing above the upper median nervule, the first and second being small, the third larger, and the fourth the largest; the lunules are capped with silvery bluishgreen, which extends beyond the fourth spot to the inner margin; between the lowest median nervule and submedian nervure on the margin is a broad greyish space irrorated with black scales, and there is a small black spot at the anal angle; on the margin is a series of narrow white lines between the veins.

Female.—Upperside. Both wings brown, with the white patch as in the male, but rather more oblique; on the margin of the posterior wings there is a narrow dark band edged internally by a narrow white line.

Underside resembles the male, but is paler, and the white bands are wider, that on the anterior wings not being interrupted, and the band on the posterior wings becoming linear from the lowest median nervule to the inner margin.

Hab. Batchian (Doherty).

Described from one male and three females.

In the Collection of the Hon. Walter Rothschild.

II.—HORAGA SELINA. 8. Figs. 14, 15.

Horaga Selina, H. Grose-Smith, "Novitates Zoologica," Vol. II., p. 513 (1895).

Exp. $\delta \cdot 1\frac{1}{4}$ inches; $2 \cdot 1\frac{3}{8}$ inches.

Male. Upperside. Dark brown, posterior wings rather paler. Anterior wings crossed in the middle at the end of the cell by a white patch, which extends obliquely from the first subcostal nervule to half-way between the lowest median nervule and the submedian nervure, its inner edge being regular; the outer edge widens rapidly from the upper end of the patch to the submedian nervules, where the patch is widest, thence becoming rather narrower and rounded at its lower end. Posterior wings with a narrow submarginal white line.

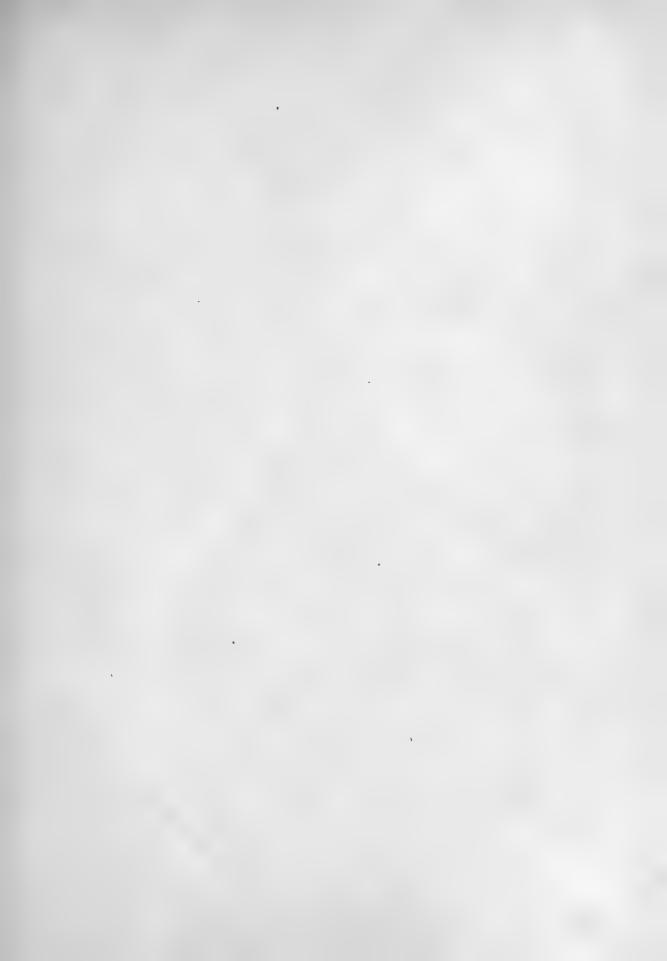
Underside. Both wings olivaceous greenish-brown, with the white patch as on the upperside, but extending to the submedian nervure; the space below that nervure to the inner margin is white. Posterior wings crossed in the middle from the costal margin to the submedian nervure by a rather broad white band, the lower end of which is dusted with metallic golden green scales, which are continued to the inner margin in a V-shaped band; the white band is followed by an olivaceous tawny space, edged externally by an irregular band of metallic green, which curves inwardly between the upper median and second subcostal nervules, thence curving outwardly to a little before the apex; this band at its lower end forms two V-shaped markings and a straight band above the anal angle; the band of metallic green is bordered outwardly throughout by a series of black spots between the veins, those between the subcostal nervules and between the two lowest median nervules being large, the others much smaller; outside this band to the outer margin the wings are pinkish grey, mottled with numerous black streaks and minute spots; there is a black spot at the anal angle.

What I take to be the female does not appear to differ from the male, which has no sex mark, in this respect resembling H. Viola, Moore, and H. Albimacula, Wood-Mas. & de Nicév.

Hab. S. Celebes (Doherty).

In the Collection of the Hon, Walter Rothschild.





ORIENTAL LYCAENIDAE XVI. THYSONOTIS VI



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PLATE XVI.

XX.—THYSONOTIS HENGIS. &. Figs. 1, 2. \(\mathbf{?}\). Fig. 3.

Thysonotis Hengis, H. Grose-Smith, "Annals and Magazine of Natural History," Ser. 6, Vol. XX., p. 517 (December, 1897).

Exp. $1\frac{5}{8}$ inches.

Male. Upperside resembles T. Wallacei, Feld., but the wings are brighter blue, and the central irroration of white scales on the anterior wings is less conspicuous; on the posterior wings the white band before the middle is narrower.

Underside differs little from T. Wallacci, but on the anterior wings the costal and apical black area is narrower, as well as the white band on the posterior wings.

Female. Upperside. Both wings darker brown than in T. Wallacci, being nearly black: on the anterior wings the dark costal band is bounded at the base by the median nervure, while in T. Wallacci it extends at the base broadly to the inner margin. On the posterior wings the white subbasal area is considerably less extended.

On the UNDERSIDE of the posterior wings the subbasal white band is narrower, the outer black area being broader; the submarginal blue band is wider and the black spots in it are more elongate; the cilia on both wings are less conspicuously white, and narrowly crossed by black at the ends of the veins.

Hab. Kapaur, S.W. Dutch New Guinea (Donerty).

In the Collections of the Hon. Walter Rothschild and Mr. Grose-Smith (types).

Described from a long series of both sexes.

It is a larger insect than *T. Wallacei*, and the wings are broader and rounder. The female resembles *T. Vidua*, Grose-Smith, but the white spot at the outer angle, and the subcostal blue streak on the upperside of the anterior wings of that species are absent, and the white area on the posterior wings is less extended and less sharply defined than in *T. Vidua*.

XXI.—THYSONOTIS LYGIA. &. Figs. 4, 5. P. Fig. 6.

Thysonotis Lygia, H. Grose-Smith, "Annals and Magazine of Natural History," Ser. 6, Vol. XX., p. 516 (December, 1897).

Exp. $\delta 1\frac{1}{4}$ inches; $\mathfrak{P} 1\frac{3}{8}$ inches.

Male. Upperside. Both wings dull blue: anterior wings with the costal and outer margins narrowly greyish black; an indistinct patch of white scales in the central area below the cell at the junction of the median nervules with the median nervure. Posterior wings with the outer two-thirds of the costal margin to the apex broadly white, and a broad greyish-black outer margin, becoming wider towards the anal angle.

Underside. Anterior wings white, with a broad black band on the costal and apical margins, which extends over the upper third of the cell and becomes wider towards the apex, thence narrowing along the outer margin to the outer angle. Posterior wings closely resemble those of *T. Phroso*, Grose-Smith, but the subbasal black band is narrower and the white band outside it extends further along the costal margin to the apex; the black spots in the submarginal blue band are less elongate; cilia of both wings black.

Female. Upperside scarcely differs from T. Phroso, but on the posterior wings the costal white area is wider.

Underside also closely resembles T. Phroso, but on the posterior wings the subbasal black band is narrower and the basal blue area is more extended.

Hab. Samarai, Dinner Island (Woodford).

In Mr. Grose-Smith's Collection.

XXII.—THYSONOTIS HORSA. &. Figs. 10, 11. \cdot . Fig. 12.

Thysonotis Horsa, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 104 (March, 1898).

Exp. $1\frac{5}{8}$ inches.

Male. Upperside resembles T. Hengis, Grose-Smith, but duller blue, without any irroration of white scales on the upperside of the anterior wings. Posterior wings without the white band of T. Hengis and T. Wallacci, Feld., only the costal margin above the costal nervure being white; the broad outer-marginal black band is wider and rather deeply indented on the veins.

Underside. On the anterior wings the black marginal band extends broadly

all round the costal and outer margins, becoming narrower to the outer angle; the azure-blue band by which it is centred is interrupted beyond the middle, and extends parallel to the outer margin as far as the lowest median nervule. On the posterior wings the white band which crosses before the middle does not, on the costal margin, approach so closely to the apex; the discal blue area as in T. Hengis, but rather more violaceous and the black spots in it approach its outer edge more closely. Cilia on both wings grey.

Female. Upperside. Both wings dusky fuliginous grey. On the anterior wings the pale central area is much more restricted and more densely irrorated by dusky grey scales. On the posterior wings there is scarcely any trace of the pale subbasal area of T. Hengis and T. Wallacei, the wings being only slightly paler towards the base.

Underside differs from *T. Hengis* as follows:—On the anterior wings the black costal and outer-marginal band is much broader, covering nearly the whole of the cell, and extending broadly along the outer margin to the outer angle. On the posterior wings the white band is rather narrower and more sinuate on its outer edge. Cilia of both wings more dusky and not crossed by black at the ends of the veins.

Hab. Ron Island, Geelvink Bay (type), and Dorey (W. Doherty).

In the Tring Museum and Mr. Grose-Smith's Collection (types 3, 2). A good series of both sexes was sent.

XXIII.—THYSONOTIS HELGA. &. Figs. 7, 8. 9. Fig. 9.

Thysonotis Helga, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 105 (March, 1898).

Exp. δ . $1\frac{1}{2}$ inches; 2. $1\frac{3}{4}$ inches.

Male. Upperside. Both wings rather brighter blue than in T. Horsa. Anterior wings with an indistinct patch of white scales in the middle of the disc; costal margin narrowly and outer margin more broadly black than in T. Horsa. Posterior wings with a broad subbasal white band crossing the wings, narrowly blue at the base; a broad outer-marginal black band, broadest towards the anal angle, not indented on the veins, and extending at the apex along one-third of the costal margin; the blue area crossing the disc between the white band and the outer-marginal black band is more restricted than in other allied species.

Underside. With the costal and outer-marginal black band broader than in T. Horsa, extending over the cell and a little below it, and more broadly along the outer margin to the outer angle, the white central area being correspondingly more restricted. Posterior wings with the central white band broader, and the submarginal azure-blue band narrower, the black spots in the blue band being less elongate. Cilia of both wings narrowly white, crossed by black at the ends of the veins.

Female. Upperside. Both wings blackish brown. Anterior wings with a conspicuous oblique broad white band, diffused outwardly, extending on the disc from a little above the uppermost median nervule, and slightly invading the cell, to the basal half of the inner margin. Posterior wings with the inner half white and dusky at the base.

Underside. Anterior wings with a costal and outer-marginal black band of uniform width, but much narrower than in the male or in *T. Hengis* and *T. Horsa*, centred by a pale azure-blue band, which extends from the base round the wings nearly to the outer angle, the rest of the wings white. Posterior wings as in the male, but the inner edge of the black outer-marginal area is more regular.

Hab. Ausus, Jobi Island (W. Doherty, April and May, 1897).

In Mr. Grose-Smith's Collection (types 3, 2) and in the Tring Museum.



ORRENTAL LYCAL MIDAE, XVIII.



Millare Krisht deletim

West, Newman ump.

PLATE XVII.

HYPOCHRYSOPS. IV.

XVI.—HYPOCHRYSOPS RUFINUS. 8. Figs. 1, 2.

Hypochrysops Rufinus, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 104 (March, 1898).

Exp. 11 inches.

Male. Upperside. Both wings dark purple, the anterior wings with the apex broadly, and the costal and outer margins more narrowly, black. Posterior wings with the costal and outer margins brownish-black.

Underside, with the cell, costal margin, and apical third bright rufous; the cell is bordered on the upperside by a metallic blue line, and traversed longitudinally by another line of the same colour, bent towards its end into the form of an irregular S placed horizontally; a bar at the end of the cell, several spots across the upper part of the disc, and a submarginal row of spots, all metallic blue; below the rufous area the ground-colour is rufous-brown, becoming darker below the cell and a little beyond it. Postericr wings bright rufous, crossed by six metallic greenish-blue bands, of which the second and third from the base are parallel, the outer bands being more or less broken up into spots, a submarginal row of similar spots; the disc is traversed by a broad, irregular band of black markings, the veins crossing this band being rufous. Cilia of both wings black.

Hab. Ron Island (W. Doherty).

In the Collection of the Hon. Walter Rothschild.

XVII.—HYPOCHRYSOPS HONORA. &. Figs. 3, 4.

Hypochrysops Honora, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 103 (March, 1898).

Exp. $1\frac{3}{8}$ inches.

Male. Upperside resembles H. Arronica, Feld., but is darker purple, with the anterior wings rather less produced at the apex; the cilia of the anterior wings are black, not mottled with white as in H. Arronica.

Underside differs from H. Arronica in the following respects: On the anterior wings the cell and costal area are greenish-brown instead of rufous; the metallic markings in the cell, costal and outer-marginal area are broader and greenish-gold instead of bluish-gold; the pale area is more dusky, and the vertical row of pale bars between the veins towards the apex is narrower and of more uniform width. On the posterior wings are three brick-red bands towards the base, not broken up into spots as in H. Arronica; the shoulder and the area between the bars are greenish-gold instead of white. The other markings differ little from those in H. Arronica, but the submarginal hastate spots on either side of the lowest median nervule are black instead of rufous, and the discal hastate marks between the median nervules of H. Arronica are represented by straight bars.

Exp. 13 inches.

Hab. New Hanover (Webster, February and March, 1897).

In the Collection of the Hon. Walter Rothschild.

XVIII.—HYPOCHRYSOPS ARISTOCLES. 2. Figs. 5, 6.

Hypochrysops Aristocles, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 103 (March, 1898).

Exp. $1\frac{1}{4}$ inches.

Female. Upperside. Anterior wings brownish-grey, with a broad white fascia covering the middle of the disc from the upper discoidal nervule to the inner margin; this band is rounded at the apex and slightly invades the cell; the basal two-thirds of the cell and the area beneath are pale silvery blue. Posterior wings dull brownish-grey, with the basal third silvery blue; the middle third is white, more broadly so towards the costa than on the inner margin.

Underside. Anterior wings resemble *H. Alyattes*, G. and S., but the dark outer-marginal area does not include a vertical white band. Posterior wings white, with two parallel brownish-black bands, one at the base and another below it, from the inner margin a little before its middle, crossing the cell and ceasing on the subcostal nervure, both bands bordered by silvery azure-blue; the disc is crossed by a third black band from a little above the anal angle to the costal margin at the apex, where it joins another outer-marginal dark band, the two bands enclosing a rather narrow white area; the third band is bordered on both sides by silvery blue lines, that on its inner side only extending to the lowest median nervule; the marginal dark band is traversed by a row of silvery blue spots divided by the veins.

Exp. $1\frac{1}{4}$ inches.

Allied to H. Alyattes, G. and S.

Hab. Meoko, Duke of York Islands (Ribbe).

In the Collection of the Hon. Walter Rothschild.

XIX.—HYPOCHRYSOPS ANTIPHON. &. Figs. 7, 8.

Hypochrysops Antiphon, H. Grose-Smith, "Novitates Zoologica," Vol. IV., p. 367 (August, 1897).

Exp. $1\frac{3}{8}$ inches.

Male. Upperside. Both wings brownish-black, with the cells and inner discal areas brilliant shining blue, tinged with purple in certain lights. The blue area on the anterior wings extends over the cell and the inner two-thirds of the discal area; on the posterior wings it is bounded anteriorly by the subcostal nervure and the second subcostal nervule, the costal, outer, and inner margins being broadly brownish-black.

Underside. Anterior wings with the costal, apical, and outer-marginal areas broadly bright chestnut-brown, shading inwardly into black; the black area extends over the cell, a longitudinal space below the cell, and a space at the end of the cell at the junctions of the submedian nervules; before the apex is an oblique irregular white band, and the rest of the wings is white; along the subcostal nervure and in the middle of the cell are elongate streaks of silvery pale metallic blue, the streak in the cell being interrupted at two-thirds from the base; beyond the cell are two transverse silvery metallic blue lines,

with similar scattered spots above them, a submarginal row of five similar spots and an indication of a sixth near the outer angle. Posterior wings white, with a basal band of chestnut-brown extending partially along the costa; the outer third is chestnut-brown, deeply indented by the white area between the second subcostal and the upper median nervules; in the brown area is a submarginal silvery blue line divided by the brown veins. Antennæ black ringed with white, with brown clubs. Cilia white, with black spots at the ends of the veins.

Hab. Kapaur.

In the Collection of the Hon. Walter Rothschild.

On the UPPERSIDE it somewhat resembles *H. Alyattes*, Godm. and Salv., but the metallic blue area is less extended and the wings are more elongate; the white areas of the underside are indistinctly visible through the wings.

XX.—HYPOCHRYSOPS AURIFER. & Figs. 9, 10.

Hypochrysops Aurifer, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 103 (March, 1898).

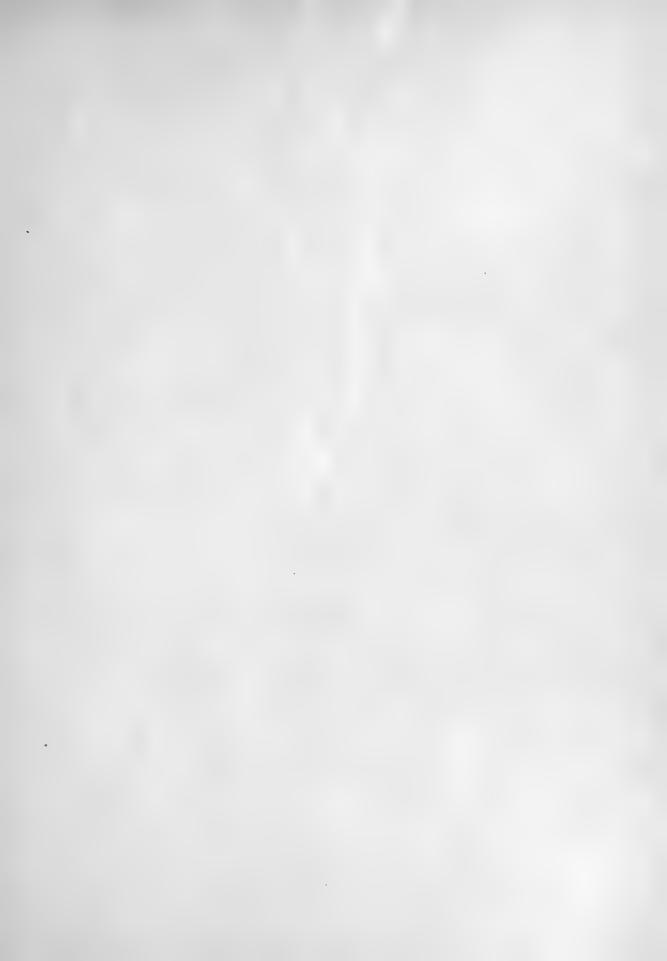
Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Both wings rather bluer and darker purple than in II. Pythias, Feld., with black margins wider than in that species; on the posterior wings the outer margin is more emarginate.

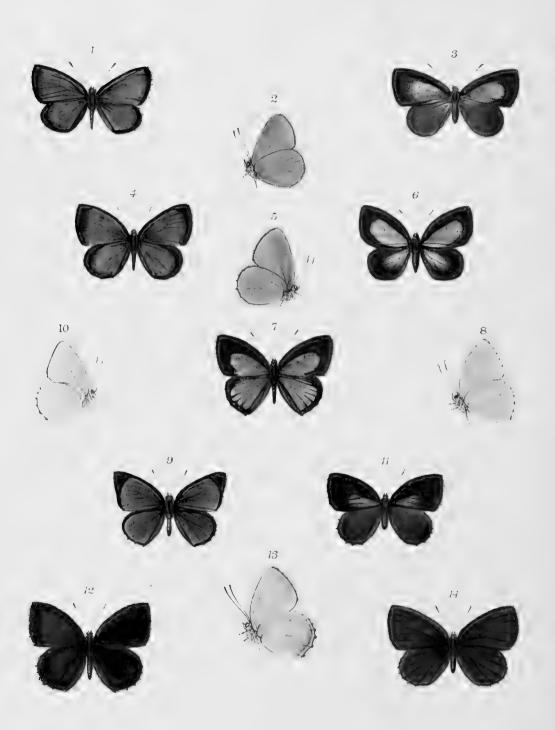
Underside. Anterior wings with red bars and bands resembling those in *H. Pythias*, and bordered with metallic spots and bars which are much broader and more greenish-golden than in that species; the ground-colour of the cell and the costal area is greenish-gold. Posterior wings with the ground-colour brilliant greenish-gold, with red spots and bands bordered on each side with black, which are rather differently arranged from those in *H. Pythias*, the bands being more broken up into distinct spots.

Hab. Fergusson Island (Meek).

In the Collection of the Hon. Walter Rothschild.



ORIENTAL LYCZENIDZE XVIIII.



Horace Knight deletlith

West, Newman 1mp.

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PLATE XVIII.

HOLOCHILA. IV.

XIX.—HOLOCHILA AURELIA. &. Figs. 1, 2. 9. Fig. 3.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Both wings rather dull purple, with the outer margins more broadly brownish-black than in H. Philotas, Feld., and the apex of the anterior wings rather more acute.

Underside browner than in H. Philotas.

Female. Upperside. Dull brown, with the central and basal areas of the anterior wings, and the base of the posterior wings shining blue, less violaceous than in the same sex of T. Philotas, and the blue area more extended on the anterior wings.

Underside as in the male.

Hab. Aru (Wallace).

In Mr. Grose-Smith's Collection, from the Wilson-Saunders Collection.

XX.—HOLOCHILA DUBITATA. 8. Figs. 4, 5. q. Fig. 6.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside closely resembles H. Aurelia, but more bluish-purple, and the wings rather broader.

Underside rather more greyish-brown.

Female. Upperside more greyish-brown than in II. Aurelia, with the blue areas on both wings more extended towards the outer margins, and the outer edge of the blue area on the anterior wings more clearly defined.

Underside as in the male.

Hab. Milne Bay, British New Guinea.

In the Collection of Dr. Staudinger.

VOL. III., JANUARY, 1899.

XXI.—HOLOCHILA AGATHA. &. Figs. 7, 8.

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Both wings bright shining blue, anterior wings with the costal and outer margins very broadly black. On the posterior wings the outer marginal black band is narrower and partially invades the blue area along the veins.

Underside. Both wings pale greyish-brown, cilia white crossed by black at the ends of the veins.

Hab. Milne Bay.

In the Collection of Dr. Staudinger. The wings are shaped as in H. Intensa, Butl. and H. Marginata, Grose-Smith, and are very acute at the anal angle of the posterior wings.

XXII.—HOLOCHILA MOIRA. &. Figs. 9, 10. g. Fig. 11.

Exp. not quite $1\frac{1}{4}$ inches.

Male. Upperside closely resembles H. Regina, Butler, but more broadly black at the apex of the anterior wings, and darker and more broadly grey on the costal margin of the posterior wings.

Underside differs little from H. Regina, but the posterior wings are very narrowly margined with black, and the cilia are more conspicuously crossed by black at the end of the veins.

Female. On the upperside of the anterior wings is a blue patch below the cell, which is darker and more restricted than in the same sex of *H. Regina*, and both wings are darker brown: cilia on each side of both wings crossed by brown at the ends of the veins.

Hab. Ferguson Island (Meek).

In Mr. Grose-Smith's Collection.

It is a larger insect than H. Regina.

XXIII.—HOLOCHILA GRANDIS.

Male. Upperside. Dull purple, broadly bordered on the costal and outer margins of both wings by brownish-black, cilia on both wings white, crossed at the ends of the veins by brownish-black, narrowly on the anterior, and more conspicuously on the posterior wings.

Underside. Both wings brownish-grey, outer margins narrowly black with cilia as on the the upperside.

Female. Upperside bronzy-brown, with a metallic blue patch between the two lowest median nervules of the anterior wings, which is only visible in certain lights.

Underside as in the male, but rather browner.

Hab. Batchian and Ternate.

In Dr. Staudinger's and Mr. Grose-Smith's Collections. The type male is in Dr. Staudinger's Collection, from Batchian, and there are two males in Mr. Grose-Smith's Collection from the same Island, captured by Mr. Wallace and Mr. Doherty respectively; the type female, captured by Mr. Doherty, also from Batchian, is in Mr. Grose-Smith's Collection, in which are two other females, one from Ternate, the other from Batchian, captured by Mr. Wallace.

Possibly this insect may be identical with *H. Gisella*, Staudinger, though, if such is the case, it is improbable that Dr. Staudinger would have sent me this specimen un-named.



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DELIGNTAL LYCAENIDAE XIX. HYPOCHRYSCPS V. WAIGEUM II.



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THE HYPOMERYSOPS CHRYSOPEDMUS NI WALGETM CORUS DANS.

PLATE XIX.

HYPOCHRYSOPS. V.

XXI.—HYPOCHRYSOPS CARMEN. 8. Figs. 1, 2.

Exp. $1\frac{3}{8}$ inches.

Male. Upperside closely resembles H. Theophanes, Grose-Smith, but the anterior wings are rather more broadly black at the apex, and on the posterior wings the purplish-blue area does not extend beyond the uppermost subcostal nervule, the space above which to the costal margin is black as to the outer half, the basal half being grey; the outer margin is more broadly black, the veins crossing the purplish-blue area being narrowly black.

Underside closely resembles *H. Theonides*, Grose-Smith, but on the anterior wings the metallic blue lines in the black area are more slender, and the broad metallic patch between the two upper median nervules is half the length of the patch in the same position in *H. Theonides*, and more horizontal.

On the posterior wings the broad black band which extends across the disc from the inner margin to the uppermost median nervule is interrupted between the two lowest of those nervules, and both edges of the white band, which crosses the basal half of the wings, are narrowly bordered by metallic blue lines, which do not occur in *H. Theonides*; the basal portion of this white band is also irrorated by pale metallic scales.

Hab. Ron (Doherty).

In the Collection of the Hon. Walter Rothschild.

Though I have described this as a distinct species, it is not improbable that it may be the male of *H. Theonides*, only the female of which species is at present known. It comes from the same island.

XXII.—HYPOCHRYSOPS CHRYSONOTUS. Q. Figs. 3, 4.

Exp. 11 inches.

Female. Upperside. Anterior wings, with the lower part of the cell and vol. III., April, 1899.

the inner three-fourths of the disc to the base, slightly metallic purplishblue; the upper part of the cell, the costal, apical and outer marginal area dull greyish-brown; an indistinct dark streak on the upper part of the disco-cellular nervules, the space above which is also slightly darker than the ground-colour.

Posterior wings, with the costal area to the subcostal nervure and nervules and outer margin (rather broadly), greyish-brown; the rest of the wings dull purplish-blue, the veins crossing the blue area on both wings greyish-brown.

Underside. Anterior wings closely resemble those of *H. Ignita*, Leach, but are paler; the transverse ochreous band crossing the disc is of more uniform width and continued as far as the submedian nervure. Posterior wings with the bands narrower, more ochreous and more broken up into spots, none of which are edged with black, as in *H. Ignita*, except the submarginal band, on the inner edge of which are three black spots, those furthest from the anal angle becoming obsolete.

Hab. Cooktown, North Queensland (Eichhorn).

In the Collection of Dr. Staudinger.

Very close to *H. Ignita*. It is considerably larger, and the blue areas on the uppersides of both wings is more extended.

XXIII.—HYPOCHRYSOPS CHRYSOTOXUS. 9. Figs. 5, 6.

Exp. $1\frac{1}{4}$ inches.

Female. Upperside closely resembles H. Chrysonotus, but paler and more silvery blue; on the posterior wings the disco-cellular nervules are conspicuously marked by brownish-black.

Underside paler than in *H. Chrysonotus*, the spots and bands are more orange-ochreous, and the metallic lines and spots are yellow-golden instead of blue-golden. On the anterior wings the transverse orange-ochreous band of spots crossing the disc is dislocated between the lowest median nervule and submedian nervure, the spot in that position being situated further from the outer margin. The markings on the posterior wings differ little from *H. Chrysonotus*, but inside the discal band of orange-ochreous spots is a large patch of yellow-golden scales.

Hab. Milne Bay, British New Guinea (Eichhorn).

In the Collection of Dr. Staudinger.

XXIV.—HYPOCHRYSOPS CHRYSODESMUS. Figs. 7, 8.

Exp. nearly $1\frac{1}{2}$ inches.

Female. Upperside. Dull brown, with purple suffusions in the middle; on the anterior wings the lower part of the cell and a space below it nearly to the inner margin is semi-transparent.

Underside. Anterior wings rather pale greyish-brown—a broad orangerufous band in the cell with two teeth which cross the cell about its middle, a broad subtriangular bar at the end of the cell, extended at its upper end and joining a costal orange band; the teeth and bars in the band are edged with black, bordered outwardly by metallic greenish-gold lines, a subcostal metallic greenish-gold band above the cell and a metallic spot on the costa at one-third from the apex; beyond this are two orange-rufous transverse bands, one crossing the disc from near the costa to the lowest median nervule, edged on each side by black and metallic greenish-gold lines, the other on the outer margin very broad, edged internally by narrow black lines and centred as far as the lowest median nervule by metallic golden-green bars, edged outwardly by black, two dusky spots on the disc, one below the cell, the other nearer the outer margin. Posterior wings with the shoulder, a band crossing the cell near the base, another at the end of the cell, four spots beyond the cell, and an irregular band crossing the disc, all orange-rufous, edged on either side by black and metallic greenish-gold markings, an outer marginal orange-rufous band, centred with lunular greenish-gold markings, and edged internally towards the anal angle by narrow black lines.

Hab. Cambodia (Mouhot).

In Mr. Grose-Smith's Collection, from Mr. Wilson Saunders' Collection; not improbably the above locality may be wrong.



PLATE XIX.

WAIGEUM. II.

VI.—WAIGEUM CORUSCANS. & Figs. 9, 10.

Waigeum Coruscans, H. Grose-Smith, "Novitates Zoologica," Vol. IV., p. 367 (August, 1897).

Exp. $1\frac{1}{2}$ inches.

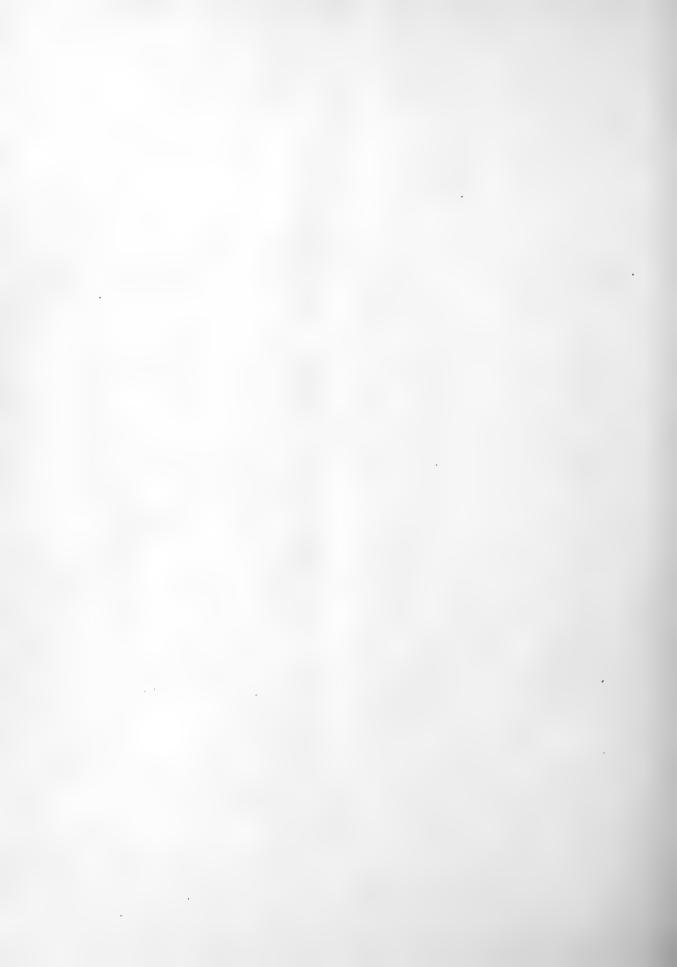
Male. Upperside. Both wings dark brown, crossed about the middle by a common broad oblique brownish-white band from the upper median nervule of the anterior to the inner margin of the posterior wings. On the anterior wings the cell and spaces beyond and below it are more or less densely irrorated by shining blue scales, but less extensively than in W. Ribbei, Röb. Posterior wings with a sub-basal band and a patch on the disc below the cell of similar scales.

Underside. Both wings brownish-black, crossed by a brownish-white band, as on the upperside, the white band being more restricted than in W. Ribbei, and its outer edge on the posterior wings more sinuate; anterior wings with the subcostal blue band and outer-marginal row of blue spots as in that species, with an additional broad streak of blue scales extending along the middle of the cell. Posterior wings with the basal black band bordered with blue, as in W. Ribbei, but broader and more sinuate outwardly; the outer half of the wings is brownish-black, crossed by two longitudinal broad metallic bands, which converge but do not form a junction at either end; the inner blue band is bordered outwardly by a narrow row of brownish-white scales, and the submarginal band is divided into spots by the black veins. Cilia on both wings brownish-white. Antennæ black. Head, thorax and abdomen brown, the last being white beneath.

Hab. Kapaur.

In the Collection of the Hon. Walter Rothschild.

Allied to W. Ribbei, but browner, rather smaller, and the wings rather narrower. VOL. III., APRIL, 1899.





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PLATE XX.

HOLOCHILA. V.

XXIV.—HOLOCHILA ÆQUALIS. Figs. 1, 2.

Holochila Æqualis, H. Grose-Smith, "Annals and Magazine of Natural History," Series VI., Vol. XX., p. 517 (December, 1897).

Exp. δ . 1 inch; \mathfrak{P} . $1\frac{1}{8}$ inches.

Male. Upperside. Both wings resemble H. Refusa, Grose-Smith, but blacker brown. On the anterior wings the white area is more extended over the cell and beyond it, and the blue suffusion at the base of both wings of H. Refusa is very slightly represented by dull slate-coloured scales which are less extended than in H. Refusa.

Underside. The outer dark brown marginal bands of both wings are twice as broad as in *H. refusa*.

Female. Upperside resembles the male, but is browner and without any bluish suffusion.

On the underside the outer dark brown marginal bands of both wings are likewise twice as broad as in H. Refusa.

Hab. Kapaur (Doherty).

In the Collections of the Hon. Walter Rothschild and Mr. H. Grose-Smith (types).

XXV.—HOLOCHILA NITENS. &. Figs. 3, 4.

Holochila Nitens, H. Grose-Smith, "Novitates Zoologicae," Vol. V., p. 107 (March, 1898).

Exp. $1\frac{1}{8}$ inches.

Male. Upperside. Anterior wings dull brown, with a basal pale silvery-blue area extending along the inner margin to three-fourths its length, extend vol. III., July, 1899.

ing obliquely upwards to the lower part of the cell, and over the base of the two lowest median nervules. Posterior wings with the basal four-fifths pale silvery-blue, the outer fifth being dull brown.

Underside white.

Hab. North Queensland.

In the Collection of the Hon. Walter Rothschild.

The apex of the anterior wings and anal angle of the posterior wings are acuminate, as in H. Fulgens and H. Zadne.

XXVI.—HOLOCHILA VICINA. 6. Figs. 5, 6. 9. Fig. 7.

Holochila Vicina, H. Grose-Smith, "Novitates Zoologica," Vol. V., p. 107 (March, 1898).

Exp. 11 inches.

Male. Upperside. Both wings pinkish-purple. Anterior wings with the apex rather broadly and the costal and outer margins more narrowly brown, suffused with the pinkish-purple coloration. Posterior wings with the costal margin paler brown and outer margin very narrowly brown.

Underside. Sordid silvery-white.

Hab. Mailu, British New Guinea (Anthony).

In the Collection of the Hon. Walter Rothschild.

The apex of the anterior wings and anal angle of the posterior wings are acuminate, as in H. Fulgens, H. Zadne, and H. Nitens.

XXVII.—HOLOCHILA ZADNE. &. Figs. 8, 9. P. Fig. 10.

Holochila Zadne, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 107 (March, 1898).

Exp. $1\frac{1}{4}$ inches.

Male. Upperside. Both wings rather pale shining blue. Anterior wings with the costal margin, apex, and outer margin rather broadly brown, broadest at the apex, and gradually narrowing along the outer margin to the outer angle. Posterior wings with the costal margin broadly and outer margin narrowly greyish-brown.

Underside. Brownish shining white; anterior wings acuminate, likewise the anal angle.

Hab. Mailu, British New Guinea (Anthony).

In the Collection of the Hon. Walter Rothschild. Nearest to *H. Fulgens*, Grose-Smith; it is the same shape as that species.

XXVIII.—HOLOCHILA SUBOVATA. &. Figs. 11, 12. Q. Fig. 13.

Holochila Subovata, H. Grose-Smith, "Novitates Zoologica," Vol. I., p. 574 (July, 1894).

Exp. Rather more than 1 inch.

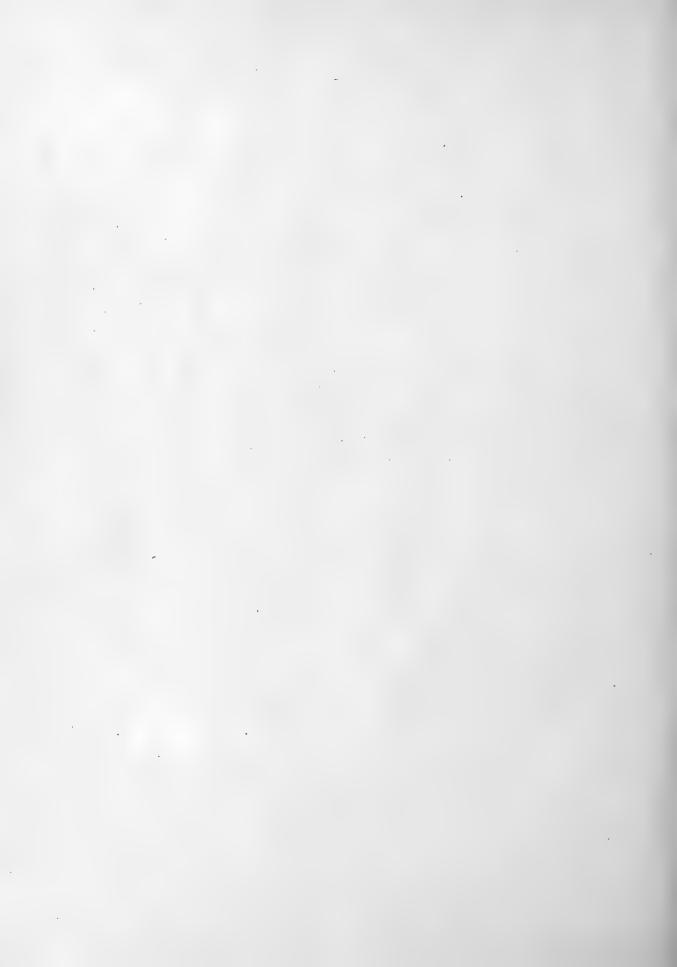
Male. Upperside. More violaceous-purple than II. Intensa and II. Ilia. Anterior wings with the costal margin narrowly, the apex more broadly, and outer margin more narrowly bordered with brown-black. Cilia on both wing white, conspicuously tipped with black at the ends of the veins. Anterior wings broader than in the above-described species, and slightly convex on the outer margin. Posterior wings narrowly edged with black.

Underside rather brownish-white, outer margin very narrowly black. Cilia white, tipped with black at the ends of the veins.

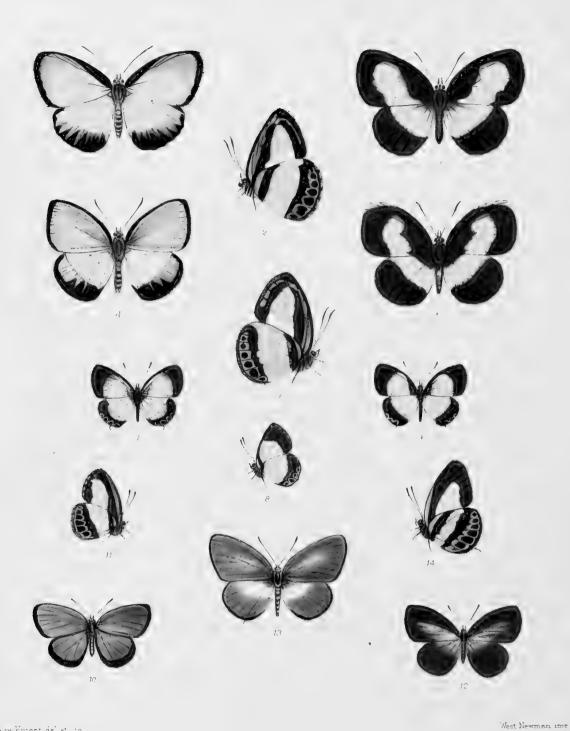
Female scarcely differs from the same sex of *H. Intensa* and *H. Ilias*, but the pale middle space extends rather more towards the base, and the cilia are marked conspicuously with black at the end of the veins.

Hab. Humboldt Bay.

In the Collections of the Hon, Walter Rothschild and Mr. H. Grose-Smith.







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PLATE XXI.

XXIV.—THYSONOTIS SULEIMA. &. Figs. 1, 2. 9. Fig. 3.

Thysonotis Suleima, H. Grose-Smith, "Annals and Magazine of Natural History," Ser. 7, Vol. II., p. 405 (November, 1898).

Exp. $1\frac{5}{8}$ inches.

Male. Upperside more greenish-blue than T. Zuleika, Grose-Smith; anterior wings with the costal margin at the base and the outer margin more broadly black, and the central white band is not irrorated by blue scales.

On the underside of the anterior wings the blue band which traverses the outer marginal black area is narrower along the outer margin than in T. Zuleika; on the posterior wings the inner edge of the submarginal blue band is lumulate between the veins, and the black spots in it are larger than in T. Zuleika.

Female. Upperside closely resembles the same sex of T. Zuleika, but on the anterior wings the apical area is not tipped with white, and the white band which crosses the middle is more oblique.

On the underside the apex of the anterior wings is not tipped with white, and on the posterior wings the submarginal blue band is also lumulate on its inner edge, the spots in this band being likewise larger. Cilia rather broadly white, crossed by grey at the ends of the veins.

Hab. St. Aignan Island (Meek).

In the Collections of Mr. H. Grose-Smith (types, 3 2) and the Hon. Walter Rothschild. This species is closely allied to T. Zuleika, but the different colouring of the male, the absence of the white tips on the anterior wings of the female, and other distinctions are sufficient to separate them.

XXV.—THYSONOTIS ZULEIKA. &. Figs. 4, 5. Q. Fig. 6.

Thysonotis Zuleika, H. Grose-Smith, "Annals and Magazine of Natural History," Ser. 7, Vol. II., p. 404.

Exp. $1\frac{1}{2}$ inches.

Male. Upperside differs from T. Apollonius, Feld., in the following respects:—On the anterior wings the white band which crosses the middle of the wings to the inner margin is much less distinct, being irrorated with blue scales, in this respect approaching T. Lampros, Druce, and the costal and outer-marginal black bands are narrower than in either of those species. On the posterior wings the white central area is considerably wider, and the dark outer marginal area is narrower than in those species.

Underside with the white areas on both wings much more extended, the black outer-marginal areas being correspondingly narrower; the blue submarginal bands on the posterior wings are also narrower, and the black spots in them are smaller and rounder.

Female. Upperside. Both wings black; anterior wings crossed about the middle, from the upper discoidal nervule to the inner margin, by an irregular, curved, transverse white band; the apical third of the costal and outer margins is rather broadly white. Posterior wings crossed a little before the middle by a broader white band than in T. Apollonius.

On the underside the apex of the anterior wings is also broadly white, and the white central band extends at its apex to the subcostal blue band; in other respects the underside is as in the male. Cilia of both wings narrowly white.

Hab. Rossel Island, Louisiade Archipelago (Meek).

In the Collections of Mr. Grose-Smith (types, § 2) and the Hon. Walter Rothschild. The female approaches that sex of *T. Dispar*, Grose-Smith, but the white bands on both wings are very much broader. It is a smaller insect than any of the above-mentioned species.

XXVI.—THYSONOTIS ALBULA. &. Figs. 7, 8. Q. Fig. 9.

Thysonotis Albula, H. Grose-Smith, "Novitates Zoologicæ," Vol. IV., p. 368 (August, 1897).

Thysonotis Olga, H. Grose-Smith, "Novitates Zoologicæ," Vol. V., p. 106 (March, 1898).

Exp. 1 inch.

Male. Upperside. Anterior wings with the outer fourth brownish-black, the costal margin narrowly and the base more broadly black, the black areas bordered inwardly by a broad, slightly metallic violaceous blue band which surrounds the white area extending over the outer half of the cell and the middle of the wings to the inner margin. Posterior wings with the outer fourth brownish-black, in which, towards the anal angle, are four metallic blue lunules

between the veins; the inner edge of the black band is indented in the middle, the indentation being filled by violaceous blue; the rest of the wings white, except at the base, which is narrowly dark grey, with an irroration of violaceous blue scales; one slender black tail.

Underside. Both wings white, with the outer third dark brown, indented on the inner edge. On the anterior wings the dark area is widest towards the costal margin, and in it is situated a row of oval black spots on the outer margin, surrounded by narrow grey rings, inside which is a row of darker spots, edged internally by indistinct grey lines; a broad brown streak at the base, which extends half-way along the costa, with a basal grey streak on the costal margin. In the dark band of the posterior wings is a submarginal row of black lunules, crowned by metallic blue lunules, except the lunule near the apex, which is surrounded by grey, and there are a few indistinct grey markings above the other lunules.

The female resembles the male, except that the blue bands on the upperside of the male are absent.

Hab. Kapaur, Dutch New Guinea, at a low elevation (Doherty).

In the Collections of the Hon. Walter Rothschild (types) and H. Grose-Smith.

Nearest to *T. Mindarus*, Feld., but the wings are rounder, and it is smaller. The female of this Butterfly was described by me, in Vol. IV. of "Novitates Zoologicæ," by mistake, as the male, and the male was subsequently described by me, in Vol. V. of that book, under the name of *T. Olga*. I have above made use of my description of *T. Olga* as the correct description of *T. Albula*, and the name "*T. Olga*" becomes a synonym.

XXVII.—THYSONOTIS CŒLINUS. J. Figs. 10, 11. Q. Fig. 12.

Thysonotis Calinus, H. Grose-Smith, "Novitates Zoologicae," Vol. V., p. 106 (1898).

Exp. $1\frac{1}{8}$ inches.

Male. Upperside. Both wings duller blue than in T. Coelius, Feld., and T. Hymetus, Feld., the male of which latter species it closely resembles, but the black marginal band on the posterior wings is wider towards the anal angle and the wings are less elongate.

Underside. Differs from T. Hymetus on the anterior wings in its white discal band being narrower and approaching nearer to the apex. On the posterior wings the white band is also rather narrower; the metallic submarginal band is more azure-blue, and its inner and outer edges are straight,

not lunulate as in T. Hymetus, the spots in the band being quadrate instead of lunulate.

Female. Upperside. Both wings dull glossy brown, with a bluish suffusion towards the base, which on the anterior wings extends over an indistinct narrow pale area representing the white band on the underside and ceasing on the upper median nervule. On the posterior wings the pale area is subbasal and indistinct.

Underside. With the white bands on both wings very much narrower than in Dr. Felder's figure of that sex of *T. Hymetus*, and on the anterior wings the white bands do not approach so closely to the apex. On the posterior wings the difference between the azure-blue coloration of the metallic submarginal band of *T. Coclinus* and the greenish-blue of *T. Hymetus* is very marked.

Hab. Ferguson Island (Meek).

In the Tring Museum and Mr. Grose-Smith's Collection (types, 3 2).

The females of this species differ very much from those of *T. Hymetus*. On the upperside they are not very unlike to *T. Eudocia*, Druce, but the pale area is more obscure and restricted than in that species, which, moreover, does not appear to have any bluish suffusion.

XXVIII.—THYSONOTIS NERINE. & Figs. 13, 14.

Exp. $1\frac{1}{2}$ inches.

Male. Upperside. Both wings carulean blue, paler than in T. Taygetus, Feld., to which group this species belongs. Anterior wings irrorated by white in the lower outer end of the cell, and the area below it. Posterior wings with a broad white band crossing the wings before the middle, and a black tail; outer margin narrowly black.

Underside. Anterior wings greyish-black, with an elongate triangular yellowish-white area, which extends over the middle of the wings, from a little above the uppermost median nervule, partially invading the cell, to the inner margin; a rather broad streak of blue scales on the costal margin at the base. Posterior wings greyish-black, crossed before the middle by a broad yellowish-white band, the outer edge of which is rather irregular; a broad submarginal band of dark blue crosses the disc, in which is situated a series of large subconical black spots between the veins; there is also a broad costal band of blue scales at the base.

Hab. Ron Island (Doherty).

In the Collection of the Hon, Walter Rothschild.



ORIENTAL LYCAENIDAE. XXII. JAMIDES I.



PLATE XXII.

JAMIDES. I.

I.—JAMIDES GRATA. &. Figs. 1, 2. Q. Fig. 3.

Jamides Grata, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 510 (December, 1895).

Exp. 1 inch.

Male. Upperside differs from J. Carissima, Butler, in having the outer margin of the anterior wings more broadly black, especially towards the apex, where the black area gradually widens and covers the apical fourth of the wings.

On the underside it scarcely differs from J. Carissima, but is somewhat duller brown.

The female on the UPPERSIDE is more shining blue than that sex of J. Carissima, being almost as brilliant as the male, but lighter in colour.

Hab. Tenimber (Doherty).

In the Collections of the Hon. Walter Rothschild and Mr. Grose-Smith.

II.—JAMIDES SEMINIGER. J. Figs. 4, 5. Q. Fig. 6.

Jamides Seminiger, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 509 (December, 1895).

Exp. 7 inch.

Male. Upperside. Both wings black, with the base dark violet purple, which colour extends over the cells on both wings and a short distance round.

Underside. Dull cinereous brown, with the usual spots and markings scarcely distinguishable from other species of the Genus.

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Female. Upperside. Dull cinereous brown; on the posterior wings is an indistinct submarginal row of darker spots, partially surrounded by obscure grey.

Underside. Paler than the male, with the spots and markings rather more clearly defined.

Hab. Batchian (Doherty), Halmaheira.

In the Collections of the Hon. Walter Rothschild and Mr. Grose-Smith. The wings are rounder than in other species of this Genus.

III.—JAMIDES TIMON. &. Figs. 7, 8. P. Fig. 9.

Jamides Timon, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 510 (December, 1895).

Exp. 11 inches.

Male. Upperside. Both wings shining glaucous purple. Anterior wings with a rather broad marginal black band, becoming somewhat broader towards the apex. Posterior wings bluish-white above the first subcostal nervule to the costal margin, shading into the ground-colour of the rest of the wings towards the base; a submarginal row of indistinct black bars or spots bordered outwardly by narrow violaceous white lines on the margin, the spots towards the anal angle the largest.

Underside. With the usual spots and markings very distinctly edged with white, being more clearly defined than in other species of this Genus. The ground-colour is more ashy brown than in *J. Cephion*, Druce, to which species or to *J. Soemias*, Druce, it seems most nearly allied.

Female. Upperside resembles the figure of that sex of J. Socmias, but is paler blue.

Hab. New Britain (Captains Cayley Webster and Cotton).

In the Collection of Mr. Grose-Smith.

It is a paler insect than either of the species above-mentioned.

IV.—JAMIDES PURPURATA. &. Figs. 10, 11. Fig. 12.

Jamides Purpurata, H. Grose-Smith, "Novitates Zoologicæ," Vol. I., p. 574 (July, 1894).

Exp. 1 inch.

Male. Upperside differs from J. Campanulata, Butler, in being somewhat

paler and bluer purple. On the anterior wings the outer-marginal dark border is narrower except at the apex, and on the posterior wings there is no dark band on the inner side of the submarginal row of indistinct spots between the veins; these spots are partially surrounded by narrow white rings, but very indistinctly so towards the apex. On the underside it is scarcely distinguishable from J. Campanulata, but the posterior wings are rather brighter brown.

Female. Upperside. Both wings dull greyish-brown, with the lower part of the cell on the anterior wings, and the space below it to the inner margin dull greyish-blue, the blue colour extending over the discal area below and a little beyond the end of the cell. On the posterior wings the blue colour extends over the cell and the lower portion of the disc, the veins where they traverse the blue area being broadly greyish-brown. There is a submarginal row of brown spots, capped with greyish-blue lunules, and bordered outwardly by narrow grey lines. Underside. Paler brown than in the male.

Hab. Humboldt Bay (Doherty), and Simbang (Cayley Webster and Cotton), New Guinea.

In the Collections of the Hon. Walter Rothschild (Type $\mbox{$\mathfrak{F}$}$) and Mr. Grose-Smith (Type $\mbox{$\mathfrak{P}$}$).

V.—JAMIDES CAROLA. &. Fig. 13. Q. Fig. 14.

Exp. 1 inch.

Male. Upperside brilliant shining blue. Anterior wings narrowly black on the costa, more widely black on the outer margin, and rather broadly black at the apex. Posterior wings with the outer margin narrowly black; a black spot near the anal angle.

Underside more ashy brown than in J. Plato, Blanch. Both wings crossed by a broad darker band narrowly edged on either side by whitish lines, the middle portion of the bands being out of line; a submarginal row of dark lunules on both wings, edged internally by a row of dark bars; a black spot near the anal angle of the posterior wings, edged on either side by a narrow metallic blue streak and broadly capped by an orange lunule.

Female. Upperside with the basal three-fourths of both wings duller shining blue than in the male; the outer fourth of the anterior wings is dull greyish-black, and on the posterior wings is a submarginal row of dark lunules crowned with bluish-grey lines, above which is a row of darker greyish-black lunules.

Hab. Tulagi, Solomon Islands (Woodford).

In the Collection of Mr. Grose-Smith.

The brilliant metallic blue of the male recalls the similar coloration of *J. Plato*, but it is quite different from that species, not only in the much larger extent of the blue coloration, but in the shape of the wings, which are comparatively broader, and less elongate.

VI.—JAMIDES TAMBORANA. 8. Fig. 15.

Exp. 11 inches.

Male. Upperside. Both wings silvery metallic blue. Anterior wings with the outer fourth greyish-black. Posterior wings with a series of submarginal black lunules, edged outwardly by white lines; the second lunule from the anal angle is the largest, thence to the apex the lunules become smaller and gradually obsolete; the outer margin is greyish-black.

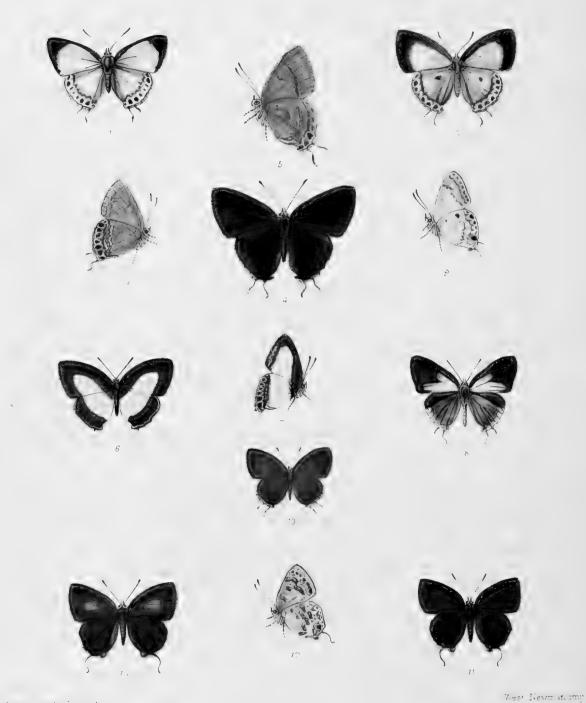
Underside greyish-brown. Anterior wings with a spot at the end of the cell and a band across the wings, the lower part of which is out of line and nearer the base, edged on both sides by white lines; a double row of dark lunules near the margin, edged also by white lines. Posterior wings with dark spots and bands closely resembling the markings on other species of this Genus; a very large black spot, with a minute metallic blue spot at its lower end, and two minute black spots at the anal angle, with orange bands on the top and both sides of the sub-anal spot, and a smaller orange band above the anal spots.

Hab. Tambora.

In the Collection of Mr. Grose-Smith.



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PLATE XXIII.

GENUS HYPOLYCÆNA, FELD.

I.—HYPOLYCÆNA ALCESTIS. &. Figs. 1, 2. Q. Fig. 3.

Theela Alcestis, H. Grose-Smith, "Entomologists' Monthly Magazine," No. 301, p. 300 (June, 1889).

Exp. $1\frac{1}{4}$ inches.

Male. Upperside pale silvery-blue. Anterior wings, costal margin, and apex rather broadly, and outer margin rather narrowly greyish-black. Posterior wings with a broad submarginal band of greyish-black spots, crowned with whitish lumular markings, above which is a row of indistinct grey markings, the middle spot nearly obsolete; below the spots is a row of narrow whitish lines, outer margin greyish black, two tails tipped with white.

Underside bluish-grey. Anterior wings with a submarginal row of narrow pale grey lunules crowned with dark grey, inside which is a row of dark grey markings, obsolete towards the costa; a pale grey line edged internally by dark grey at the end of the cell. Posterior wings with a row of black spots crowned with white and dark grey markings, as on the upperside, but the black spot before the anal angle is obsolete; above these is an interrupted pale silvery-blue narrow band, inside which is a row of confluent red spots edged on each side by black, and pale grey beyond, the fourth red spot the largest, extending outwardly to the row of black spots; the red spot above the obsolete black spot is sagittate, a black line, edged by grey on both sides above the anal angle, a narrow dark line, edged internally by pale grey at the end of the cell.

Female resembles the male, but is larger and more grey.

Hab. Guadaleanar and Tulagi, Solomon Islands (Woodford).

In Mr. Grose-Smith's Collection.

II.—HYPOLYCÆNA ERASMUS. 8. Figs. 4, 5.

Male. Upperside brilliant dark bluish-purple; posterior wings with a narrow white line at the anal angle, and two tails tipped with white.

Underside brown, slightly tinged with green; a spot at the end of the cell, a median row of spots across the disc (the two spots below the lowest median nervule out of line and rather nearer the base), and an indistinct submarginal band, darker brown and edged on each side by white lines. Posterior wings with a submarginal row of lunules all brown, except those between the two lower median nervules and at the anal angle, which are black and surrounded by narrow white lines; an interrupted row of brighter brown spots across the disc, a large spot at the end of the cell, and a sub-basal black spot, each edged on either side by narrow white lines, a narrow black line on the outer margin.

Hab. New Ireland.

In Mr. Grose-Smith's Collection.

Near to *H. Erylus*, Godart, but the spots on both wings are broader, and the discal row of spots on the anterior wings is interrupted, and there are no orange markings round the black spots near the anal angle of the posterior wings.

GENUS PSEUDONOTIS, DRUCE.

I.—PSEUDONOTIS MILO. &. Figs. 6, 7.

Myrina Milo, H. Grose-Smith, "Annals and Magazine of Natural History," Ser. 6, Vol. XVIII., p. 155 (August, 1896).

Exp. $1\frac{1}{8}$ inches.

Male. Upperside. Both wings greyish-brown, crossed by a common central broad white band extending from the lower discoidal nervule of the anterior to the inner margin of the posterior wings, as in M. Danis, Felder, but the band is wider on the anterior wings. On the posterior wings is a very narrow, well-defined, submarginal white line, extending nearly to the apex.

Underside with the white band as above, but on the anterior wings it extends nearer to the apex and costal margin, and in the dark outer-marginal area there is a band of narrow blue lunules. On the posterior wings, in the dark outer-marginal area, is a submarginal band of silvery azure-blue lunules, centred with black, those nearest the apex the smallest, gradually increasing in size to

the submedian nervure; above the anal angle the lunule with its central spot is the smallest; above the two lunules nearest the anal angle are several silvery azure-blue spots and lines, crowned by a **V**-shaped black line, and another black line situated towards the inner margin. The posterior wings have two tails.

Hab. New Ireland.

In the Collection of Mr. Grose-Smith.

Nearest to M. Danis, but differs from it in the absence of the lunules on the upperside of the posterior wings of that species, and on the underside in the deeper and brighter colouring of the lunules on the posterior wings, and otherwise as before mentioned. It is also a smaller species.

GENUS CHLIARIA, MOORE.

I.—CHLIARIA XENIA. &. Figs. 8, 9. g. Fig. 10.

Chliaria Xenia, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 512 (December, 1895).

Exp. 1 inch.

Male. Upperside. Anterior wings brownish-black, a pale whitish-blue space from the base to near the end of the cell and extending below it, and below the lowest median nervule to three-fourths its length, and thence to the inner margin. Posterior wings with a marginal row of conical spots of the same colour, situate between the veins from the discoidal nervule to the anal angle; both wings in certain lights brilliantly suffused with blue.

Underside. Both wings brownish-grey. Anterior wings with an indistinct spot at the end of the cell; the disc crossed beyond the middle by a row of contiguous brown spots or bars, of which those between the upper discoidal and upper median nervules are out of line and nearer the margin; a rather broad outer-marginal pale brown band, in which are situate a row of whitish lunules. Posterior wings with a black spot near the base, and another, larger, towards the apex, both situate between the costal nervure and first subcostal nervule; an indistinct spot at the end of the cell, and an irregular row of brown bars across the disc beyond the middle; a submarginal row of conical brown spots, of which that between the two lowest median nervules is very large and is surrounded by pale tawny; between this spot and the anal black spot is a patch of silvery-blue scales.

Female. Upperside dark brown, slightly paler towards the base, with white cilia, and a very narrow submarginal white line towards the anal angle of the posterior wings.

Underside with the spots and markings brighter and more clearly defined than in the male.

Hab. S. Celebes (Doherty).

In the Collection of the Hon. Walter Rothschild.

Described from a single specimen of each sex. Nearest to C. Kina, Hew., but abundantly distinct.

GENUS SINTHUSA, MOORE.

I.—SINTHUSA VERENA. &. Figs. 11, 12. Q. Fig. 13.

Sinthusa Verena, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 514 (December, 1895).

Exp. 3. 1 inch. 9. $1\frac{1}{4}$ inches.

Male. Upperside scarcely distinguishable from S. Grotei, Moore, but rather darker purple, and the purple area on the anterior wings more restricted and better defined.

Underside. Anterior wings differ from S. Grotei in having a dark spot edged on both sides with white across the middle of the cell, and the outer row of spots across the disc is broader and darker. On the posterior wings the spot above the subcostal nervure near the base is paler, and the two spots in the cell of S. Grotei are represented by one spot; the small spot below the cell of S. Grotei is absent. The white lines which border the spots on both wings are wider than in S. Grotei.

Female. Upperside. Both wings brown, slightly suffused with golden bronze; a diffused pale brown patch in the middle of the anterior wings.

Underside. As in the male, but paler.

Hab. S. Celebes (Doherty).

In the Collection of the Hon. Walter Rothschild. Described from a male and two females.





PLATE XXIV.

HYPOCHRYSOPS. VI.

XXV.—HYPOCHRYSOPS ALIX. 8. Figs. 1, 2.

Hypochrysops Alix, H. Grose-Smith, "Novitates Zoologicæ," Vol. VII., p. 88 (March, 1900).

Exp. $1\frac{3}{8}$ inches.

Male. Upperside. Both wings resemble H. Theon, Feld., but darker blue; on the anterior wings the apical area is less broadly black, and the pale area along the lower side of the cell is nearly obsolete; on the posterior wings the costal area is grey instead of white.

Underside. Anterior wings with the pale area more restricted and more sordid white, the outer margin more broadly brownish-grey; the metallic markings along the costa nearly obsolete, and restricted to two parallel metallic streaks on either side of the cell, and an indication of the prolongation of the same as a double row from the ends of subcostal and median nervures to near the outer margin; a submarginal row of metallic spots along the outer margin. On the posterior wings the white horizontal band before the middle is narrower, the black bars on the disc are broader, and the metallic scales which occupy the interspaces are green instead of blue as in H. Theon.

Hab. Milne Bay, British New Guinea (A. S. Meek).

In the Collection of the Hon. Walter Rothschild.

XXVI.—HYPOCHRYSOPS RUFINUS. 9. Figs. 3, 4.

Hypochrysops Rufinus, &, H. Grose-Smith, "Novitates Zoologicae," Vol. V., p. 104 (March, 1898); "Rhopalocera Exotica," Oriental Lycanidae, Plate vol. III., July, 1900.

XVII.; Hypochrysops IV., Figs. 1, 2, p. 23 (October, 1898); "Novitates Zoologice," Vol. VII., p. 88 (March, 1900).

Exp. 7 inch.

Female. Upperside. Both wings rufous-brown, except the outer half of the posterior wings, which is bright fulvous.

Underside. As in the male.

Hab. Milne Bay (Meek).

In the Collection of the Hon. Walter Rothschild.

I may be wrong in describing this insect as the female of *H. Rufinus*, Gr.-Sm. The specimen is much rubbed on the underside, and I have had difficulty in comparing the spots and markings. It may be proved hereafter to be a distinct species.

XXVII.—HYPOCHRYSOPS CLEON. Q. Figs. 5, 6.

Hypochrysops Cleon, 2, H. Grose-Smith, "Novitates Zoologicæ," Vol. VII., p. 88 (March, 1900).

Exp. 1 inch.

Female. Upperside. Anterior wings brownish-grey, with the base, lower part of the cell, the area at the base of the median nervules, and below them to the inner margin, pale iridescent blue. Posterior wings duller brownish-grey, with the basal half pale iridescent blue.

Underside. Anterior wings pale cinereous brown with a dark patch extending over the middle of the disc, the cell, costal area to the apex, and thence broadly along the outer margin, and a row of spots in the dark patch, ochreous, two streaks along the costa, another in the middle of the cell curving downwards at its outer end, a bar at the end of the cell, several subcostal spots, and a submarginal row of spots all metallic bluish-green, two dark spots below the cell on either side of the lowest median nervule, the outer one centred by ochreous; a whitish triangular spot before the apex. Posterior wings with the shoulder and six bars crossing the wings, bright rufous, a marginal band paler rufous, a streak below the shoulder and the rufous bars bordered by metallic bluish-green; the sixth rufous bar is bordered broadly on either side by metallic bars, also bluish-green; the disc is darker in the middle than the rest of the wings; a space on the costa between the third and fourth rufous bars, another space beyond the fourth bar, and a third space between the fifth and sixth bars, pinkish-white; the cilia at the ends of the veins are barred by brown, between which they are pale grey.

Hab. Milne Bay (Meek).

In the Collection of the Hon. Walter Rothschild.

XXVIII.—HYPOCHRYSOPS CLEONIDES. 9. Figs. 7, 8.

Hypochrysops Cleonides, H. Grose-Smith, "Novitates Zoologicae," p. 89. (March, 1900).

Exp. $1\frac{1}{8}$ inch.

Female. Upperside closely resembles H. Cleon, but both wings are duller grey, and the basal blue is likewise duller.

Underside differs from H. Cleon on the anterior wings in being paler, and there is only one black spot below the cell, situate above the junction of the lowest median nervule. Posterior wings with markings similar to those in H. Cleon, but the fifth bar is bordered outwardly by a metallic line, which is not the case in H. Cleon, while the broad metallic band which borders inwardly the sixth rufous band of H. Cleon is absent; the discal area is not darker in the middle, as in H. Cleon, and the area between the fifth and sixth bars, which is pinkish-white in H. Cleon, is the same colour as the ground-colour of the rest of the wings. There is no trace of the cilia being crossed by brown at the ends of the yeins.

Hab. Milne Bay (Meek).

In the Collection of the Hon. Walter Rothschild.



PLATE XXIV.

THYSONOTIS VIII.

XIX.—THYSONOTIS PHROSO. 6. Figs. 9, 10.

Thysonotis Phroso, \$, H. Grose-Smith, "Novitates Zoologica," Vol. IV., p. 313 (August, 1897); "Rhopalocera Exotica," Part XLII., p. 47; Thysonotis V. Figs. 10, 11. \$.

Exp. $1\frac{5}{8}$ inch.

Male. Upperside resembles Thysonotis Horsa, Grose-Smith, but on the anterior wings there is a sub-horizontal white streak in the middle of the wings extending below the median nervure and the basal third of the median nervules, and on the posterior wings the outer marginal black area towards the anal angle is much narrower.

The underside does not differ from the female.

Hab. Milne Bay (A. S. Meek).

In the Collection of the Hon. Walter Rothschild.

I am glad to have the opportunity of describing and figuring the male of this distinct species.

XXIX.—THYSONOTIS ARYANUS. &. Figs. 11, 12. Q. Fig. 13.

Thysonotis Aryanus, H. Grose-Smith, "Novitates Zoologicæ," Vol. II., p. 512 (1895).

Exp. $\delta \cdot 1\frac{1}{8}$ inch. $2 \cdot 1\frac{1}{16}$ inch.

Male. Upperside resembles T. Hymetus, Feld., but rather darker violaceous, with the black marginal band on both wings wider than in that species, but narrower than in T. Piepersi, Snell.

Underside. Both wings with much broader marginal black bands than in either of those species. On the anterior wings the greenish-blue subcostal band extends from the base to beyond the middle. On the posterior wings the

black lunules in the submarginal blue band are broader and indented on their outer edges instead of being straight, as in *T. Hymetus*; the basal black bar is broader, and margined with blue only at the base and along the costa for a short distance.

Female. Upperside differs from that sex of T. Hymetus and T. Piepersi in the pale area being much more restricted, not extending on the anterior wings beyond the lower end of the cell, and on the posterior wings being only faintly represented by a rather pale space crossing the wings before the middle.

On the UNDERSIDE the pale area is represented by a rather broad white band, which, however, is very much narrower than in the females of either T. Hymetus or T. Piepersi.

Hab. Batchian, Ternate, and Halmaheira.

In the Collections of the Hon. Walter Rothschild and H. Grose-Smith.

The wings are the same shape as T. Piepersi and rather more elongate than T. Hymetus.

ADDITIONS AND CORRECTIONS.

The following observations relate for the most part to Vol. I. of this Work:—

ACRÆA.

VI.—ACRÆA KHARA (p. 5, pl. ii., figs. 1, 2.)

Acrea Khara, H. Grose Smith, "Annals and Magazine of Natural History" (February, 1889).

Professor Aurivillius identifies this species with A. Areca, Mabille, "Bulletin de la Société Entomologique de France," ser. 6, vol. viii., p. clxix. (June, 1889); but our name has the priority.

HYPOLIMMAS I.

II.—HYPOLIMMAS STANLEYI (Hyp. p. 2, pl. i., figs. 3 and 4.

According to Prof. Aurivillius, "Entomologisk Tidskrift," xv., p. 281, the synonymy of this species is as follows:—

Diadema Mechowi, Dewitz, "Berliner Entomologische Zeitschrift," xxxiii., p. 187, pl. 1, fig. 2 (1884).

Diadema Ragiens, Capronnier, "Comptes Rendus de la Société Entomologique de Belgique," xxxviii., p. 123 (1889).

Hypolimmas Stanleyi, Grose Smith, "Proceedings of the Zoological Society of London," 1890, p. 467.

But we are not satisfied that these identifications are correct.

EUPHÆDRA.

II.—EUPHÆDRA JOHNSTONI (Euph. p. 2, pl. i., figs. 3 and 4.)

According to Prof. Aurivillius, "Entomologisk Tidskrift," xv., p. 292, the synonymy of this species is as follows:

Romaleosoma Wardi, Druce, "Cistula Entomologica," i., p. 286 (1874).

Euphædra Johnstoni, Butler, "Proceedings of the Zoological Society of London, 1887, p. 569; Smith and Kirby, "Rhopalocera Exotica."

AFRICAN LYCÆNIDÆ.

Numerous comments on the two first Volumes of "Rhopalocera Exotica," have been published, but it would occupy too much space to discuss them here in detail.

Most of them relate to the *Lipteninæ*, to which sub-family the majority of the African Lycanidæ which we have figured belong.

Our readers are therefore referred to Dr. Röber's Synopsis in Staudinger and Schatz' "Exotische Schmetterlinge," and to papers by Dr. Karsch and Professor Aurivillius in the "Berliner Entomologische Zeitschrift," "Entomologische Nachrichten," and "Entomologisk Tidskrift," as well as to the Reports on Lycænidæ in the Zoological Record.

ERRATA.

Papilio Mercutius (p. 33) is figured (Plate XIV., Figs. 1, 2) under the name of P. Hollandi (preoccupied).

AFRICAN LYCÆNIDÆ.

P. 87, line 24: for Epitola Benitenais read E. Benitensis.

P. 118, line 18: for Pentila Libyssa, var. Libyssina read var. Libyssina.

ADDITIONS AND CORRECTIONS.

- ORNITHOPTERA III. The letterpress to this Plate should be corrected from pp. 1, 2 to pp. 5, 6.
- PAPILIO XVI. Figs. 3, 4. Papilio Mazeppa is the female of P. Cutorina, Stgr.
- PIERINÆ, HUPHINA III. Letterpress, p. 9, at the bottom, pro "B. Nabis, B. Latilimbata and B. Agnata" lege "H." in each case.
- NYMPHALINÆ, NEPTIS II. Figs. 1, 2. Pro "Neptis Callina" lege "Pseudathyma Callina."
- SATYRIDÆ, PEDALIODES IV. Figs. 1, 2. Pro "Pedaliodes Phalsi" lege "Oxeoschistus Phalsi."
- SATYRIDÆ, MYCALESIS IV. Figs. 4, 5. Pro "Mycalesis Remulina" lege "Mycalesis Bizonata."
- ERYCINIDÆ I. Letterpress, p. 4, line 1, insert "Figs. 13, 14." after "Aricoris Plagiaria."
- ERYCINIDÆ II. Figs. 17, 18. Pro "Symniachia" lege "Symmachia."
- AFRICAN LYCÆNIDÆ XXVI. Letterpress, p. 124, line 7, pro "Chrysorychia Mendecre" lege "C. Mendeche."
- ORIENTAL LYCÆNIDÆ XIV. Figs. 4, 5. "Arhopala Clarissa" is A. Argentea, Stgr.
- ORIENTAL LYCÆNIDÆ XIV. Figs. 6, 7. "Arhopala Strophe" is A. Axiothea, Hew.
- ORIENTAL LYCÆNIDÆ XVIII. Letterpress, p. 14, line 27, insert "&. Figs. 12, 13. q. Fig. 14." after "Holochila Grandis."



ADDITIONS AND CORRECTIONS.

ORNITHOPTERA. I.

I.—ORNITHOPTERA REGINÆ.

Ornithoptera Reginæ, Salvin, "Proceedings of the Zoological Society of London," 1888, p. 117.

Ornithoptera Victoriæ, H. Grose Smith, "Annals of Natural History," and Grose Smith and Kirby, "Rhopalocera Exotica," p. 1, pl. i.; Salvin and Godman, "Proceedings of the Zoological Society of London," 1887, p. 190 (nec Gray).

Mr. Salvin considers the insect which we have figured from the Island of Malayta (or Maleita) to represent a local form sufficiently distinct to deserve a name.

PAPILIO. III.

VI.—PAPILIO LESCHES.

Papilio Lesches, Godman and Salvin, "Proceedings of the Zoological Society of London," 1880, p. 614; Salvin, "Entomologist's Monthly Magazine," vol. 24, p. 275 (1888).

Papilio Bicolor, Kirby, "Annals of Natural History," and Grose Smith and Kirby, "Rhopalocera Exotica," p. 7, pl. iii. figs. 3 and 4.

"Our specimens were taken about thirty miles from Port Moresby, S.E. New Guinea, by Mr. Andrew Goldie." (Salvin, l.c.)

IXIAS. I.

III.—IXIAS FLAVIPENNIS.

Ixias Flavipennis, H. Grose Smith, "Forbes' Naturalist's Wanderings," p. 275 (1885); Grose Smith and Kirby, "Rhopalocera Exotica," p. 2, pl. i. figs. 6 and 7.

Ixias Pyritis, Weymer, "Stettiner Entomologische Zeitung," xlviii. p. 13. pl. i. fig. 4 (1887).

ASTHIPA. I.

ASTHIPA SCHENKII (Rhopalocera Exotica, p. 3).

Danais Schenkii, Koch, "Indo-Australische Lepidopteren-Fauna," p. 107 (1865).

Mr. J. J. Weir informs us that he has detected a sexual brand on the posterior wings of the male of this species.

ACRÆA. I.

V.—ACRÆA BRÆSIA.

Acraa Brasia, Godman; Grose Smith and Kirby, "Rhopalocera Exotica," p. 3, pl. i. f. 7; Butler, "Proceedings of the Zoological Society of London," 1885, p. 760 (1886).

CHARAXES. I.

I.—CHARAXES VIOLETTA.

Charaxes Violetta, H. Grose Smith, "Entomologist's Monthly Magazine," and Grose Smith and Kirby, "Rhopalocera Exotica," p. 1, pl. i. figs. 1–3; Monteiro, Delagoa Bay, frontispiece, fig. 3 (1891).

IV.—CHARAXES NEPENTHES.

Charaxes Nepenthes, H. Grose Smith, "Entomologist's Monthly Magazine," and Grose Smith and Kirby, "Rhopalocera Exotica," p. 4, pl. ii. f. 3, 4.

Charaxes Nepenthes, De Nicéville, "Butterflies of India, Burmah, and Ceylon," vol. ii. p. 274, note (1886).

Hab. Siam (Bock).

VI.—CHARAXES NICHETES.

Charaxes Nichetes, H. Grose Smith, "Entomologist's Monthly Magazine," and Grose Smith and Kirby, "Rhopalocera Exotica," p. 7, pl. iv. f. 1-3.

Charaxes Hamatus, Dew.; "Nova Acta Acad. Leop. Cærol. Nat. Cur." I., p. 371, pl. xvii. f. 12 (1887).

AFRICAN LYCÆNIDÆ.

PLATE II.

The letterpress to this plate should be corrected from pp. 1-6 to pp. 5-10.

EPITOLA.

V.—EPITOLA VERSICOLOR (African Lycenide, pl. vii. f. 7-10).

Epitola Versicolor, Kirby, "Annals of Natural History" (June, 1887); and Grose Smith and Kirby, "Rhopalocera Exotica," p. 28.

9. Epitola Leonina, 9. Staudinger, "Exotische Tagfalter," p. 288 (1888), teste Staud.

LIPTENA.

I.—LIPTENA ACRÆA (African Lycanida, pl. i. f. 5, 6).

Liptena Acræa, Westwood, "Genera of Diurnal Lepidoptera"; Grose Smith and Kirby, "Rhopolacera Exotica," p. 1.

Dr. Staudinger is inclined to regard L. Acrea, Westwood, and L. Acreoides, Fervida, and Echo of Smith and Kirby, as all forms of one variable species.

PSEUDERESIA.

III.—PSEUDERESIA RUBRICA.

Liptena Rubrica, H. H. Druce, "Entomologist's Monthly Magazine," vol. 25, p. 108 (1888); vol. 28, p. 65 (1892).

Pseuderesia Zoraida, Grose Smith and Kirby, "Rhopolacera Exotica; African Lycænidæ," p. 36, pl. ix. f. 9–12 (1890).

VII.—PSEUDERESIA DEBORA (African Lycaenidae, pl. xiv. f. 1, 2).

Pseuderesia Debora, Kirby, "Annals of Natural History" (September, 1890), and Grose Smith and Kirby, "Rhopalocera Exotica," p. 57.

Durbania Ashira, Holland, "Psyche," v. p. 428 (November, 1890), teste Holl.

IX.—PSEUDERESIA SIMILIS (African Lycenide, pl. xiv. f. 3, 4).

Pseuderesia Similis, Kirby, "Annals of Natural History" (September, 1890), and Grose Smith and Kirby, "Rhopalocera Exotica," p. 58.

Durbania Olombo, Holland, "Pysche," v. p. 429 (November, 1890), teste Holl.

X.—PSEUDERESIA CELLULARIS (African Lycænidæ, pl. xiv. f. 5-8).

Pseuderesia Cellularis, Kirby, "Annals of Natural History" (September, 1890); and Grose Smith and Kirby, "Rhopalocera Exotica," p. 59.

Durbania Mondo, Holland, "Psyche," v. p. 428 (November, 1890), teste Holl.

LARINOPODA.

V.—LARINOPODA EUREMA (African Lycænidæ, pl. ix. f. 7, 8).

Phytala Eurema, Plötz, "Stettiner Entomologische Zeitung" (1880).

- g Larinopoda Eurema, Grose Smith and Kirby, "Rhopalocera Exotica," p. 38 (1890).
- & Larinopoda Varipes, Kirby, "Annals of Natural History" (1887); Grose Smith and Kirby, "Rhopalocera Exotica," p. 6, pl. ii. f. 5, 6 (1887).

Liptena Libussa, Staudinger, "Exotische Tagfalter," p. 268 (1888).

The above synonymy has been suggested to us by Dr. Staudinger, and appears to be correct.

TERIOMIMA.

III.—TERIOMIMA PUELLA (African Lycenide, p. 12, pl. iii. f. 9, 10).

IV.—TERIOMIMA SUBPUNCTATA (p. 13, pl. iii. f. 11, 12).

Dr. Staudinger has received both these species from East Africa, and doubts their occurrence in West Africa.

VI.—TERIOMIMA DISPAR (African Lycenidæ, pl. iv. f. 9-12).

Teriomima Dispar, Kirby, "Annals of Natural History" (May, 1887); Grose Smith and Kirby, "Rhopalocera Exotica," p. 17.

Mr. H. Druce ("Entomologist's Monthly Magazine," vol. 28, p. 65, March 1892) points out the probable identity of the male of this species with *Liptena Muestra*, Möschler, "Abhandlungen herausgeben von der senckenbergischer naturforschenden Gesellschaft," vol. xv. p. 63, plate, f. 21 (April, 1887). In this case our name would still stand for the female insect figured, if it is a distinct species, as we have already suggested (*l.c.*).

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Latimargina	ata 2	1AA,		5, 0	٠	1.11	NEPTIS.			
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Cerasa .	٠	IV.		1, 2		11	Fasciata .	٠	IV	1		12
Igola .	•	IV.	•	5		12	Funerea .		VI	1, 2		20
Insularis .	•	V.		6, 7		16	Georgiana		VI	3, 4		20
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Niobe .				10		18	Sacha .	٠	VI	-, -		21
	·		·		•		Sambawana	•	IV	2, 3		12
Appias.		T		0.4 5		- 1	Singhapura		III	1, 2		9
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Undifera .		XVIII.	•	11, 12	(65)	5) 77	Princessa	•		3, 4		3
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Ulava .		I.		6, 7		4	Acutipennis		III	10, 11		14
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Melusine	٠	II.	٠	1, 2, 3		5	Medorina		I	9, 10, 11		3
Belenois.							Mirandola		I	7, 8		2
Isokani .		II.		9, 10, 11		7	Nella .		II	6, 7, 8		7
Lasti .		II.		1, 2, 3		5	Praxidice		III	6, 7		12
Majungana		II.	٠	7, 8		7	Proserpina		III	1, 2, 3		11
Nagare .		II.	٠	4, 5, 6		6	Rhomboidea		II	3, 4, 5		6
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Sinis	I.	. 2, 3		2	Heros II		
D====== (12, T					Plotinus . I.	*	
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Paradoxa .	I.			3	Theophanes . II.		
T (0)	. ,				Thesaurus . I.		
Epimastidia. (Or. I		0 7 0					
Sodalis				4	HYPOCYSTA.	0.0.10	
bodans	Δ1.	. 9		5	Irius I.	. 8, 9, 10	. 4
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Doreas .	. · I	7, 8	. 4		
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Inopinatus		XII.		1, 2		27	APPIAS.						
Junodi .		XIV.		3, 4		34	Flavius .		I.		3, 4, 5		1
Lacydes .		XVI.		1, 2		39	Florentia		I.		6, 7, 8		2
Mercutius		XIV.		1, 2		33	Nebo .		I.		1, 2		1
(P. Hol	-				•		TACHYRIS.						
Paron .		XIII.		3, 4		30	Euryxantha		VI.		7, 8		22
Polistratus				5, 6		31			yxantha			•	64 44
Stratiotes		100000000000000000000000000000000000000		1, 2		29	DELIAS.	Lui	gaunena	016	i tate.)		
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VI COSCCII		23. Y .	•	л, м	•	01	Dohertyi		IV.		7, 8		14
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DISMORPHIA.							Euryxantha	_				•	J
Acutipennis		III.		10, 11		14	Fasciata.	(000	IV.		1 1		12
Cretacea		III.		4, 5		12	Funerea .		VI.		1, 2	•	20
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Proserpina		III.				11	Singhapura	0	III.				9
Rhomboidea	-	II.		3, 4, 5		6	Splendida	4	IV.		4, 5, 6		13
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Tricolor	•	11.	•	1, 2		Э		1AL	IID.T—	יוער-	INALINÆ.		
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Liliana .		I.		7, 8, 9		2	Melusine		II.	٠	1, 2, 3	٠	5
Mabella .		I.		4, 5, 6		1	RAVADEBA.						
Mahobo .		I.		1, 2, 3		1	Philo .		I.		7, 8		7
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Cerasa .		IV.				11	Dohertyi		III.		3, 4		10
Igola .		IV.				12	Gorgo .		III.		1, 2		9
Insularis		V.		6, 7		16	Microps .		II.		4, 5		6
Iturina .		~ ~ ~ ~		2 1		12	Occulta .		I.		5, 6		2
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Mombasæ		IV.		9, 10		14		EL	YMNII	NA	Ξ.		
Newtoni.						17	ELYMNIAS.						
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r issizonata	•	1.	•	θ, τ	•	_	ARGYRONYMPHA.		т.				0
EUTHALIA.							Rubianensis	٠		•	4, 5		2
Adeona .	•	IV.		5, 6	٠	13	Ulava .	•	1.	٠	6, 7	•	4
Irrubescens		IV.		,		13	Hypocysta.						
Ludonia .	•	IV.		1, 2, 3, 4	٠	11	Irius .		1.		8, 9, 10		4
MYNES.													
Cottonis.		II.		5, 6		6	PEDALIODES.						
Websteri		II.		3, 4		4	Calisto .		III.		9, 10		13
\mathbf{W} oodfordi		II.		1, 2		3	Cyrene .		III.		7, 8	٠	13
							Ferratilis		II.		6		
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-							Modesta .		XIX.				81
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Semirufa		I.		5, 6		3	Marginalis		XIX.		15, 16		83
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EPITOLA.	ÆΝ	IDÆ (AFR	ican).			_			·	., 0	•	00
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RHOPALOCERA EXOTICA,

BEING

ILLUSTRATIONS OF NEW, RARE, AND UNFIGURED SPECIES

OF

BUTTERFLIES.

BY

H. GROSE SMITH, B.A., F.E.S., F.Z.S., &c.,

W. F. KIRBY, F.L.S., F.E.S., &c.

VOL. II.

WITH SIXTY HAND-COLOURED PLATES.

LONDON:

GURNEY & JACKSON, I, PATERNOSTER ROW, (Successors to Mr. VAN VOORST.)

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